Lab on a Chip

Devices and applications at the micro- and nanoscale

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See Xiaoming Liu, Zhuo Chen *et al.*, pp. 1528–1546.
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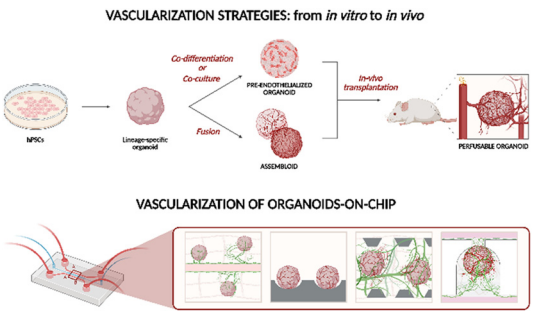
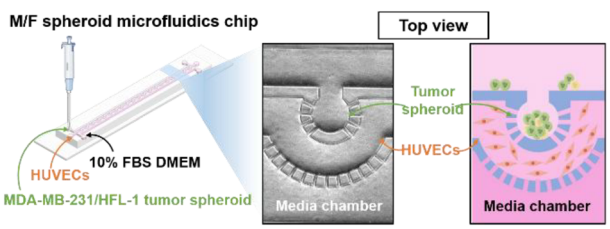
Inside cover
See Fatih Inci *et al.*, pp. 1943–1957.
Image reproduced by permission of Fatih Inci from *Lab Chip*, 2026, **26**, 1943.

CRITICAL REVIEW



COMMUNICATION

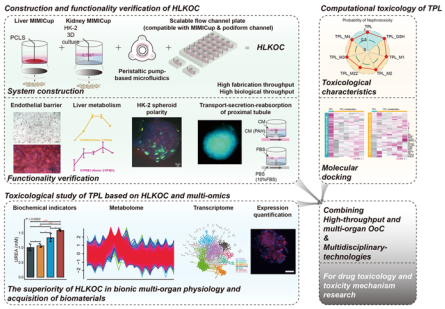


PAPERS

1830

A high-throughput liver-kidney metabolic interaction chip for insights into the nephrotoxicity mechanisms of triptolide

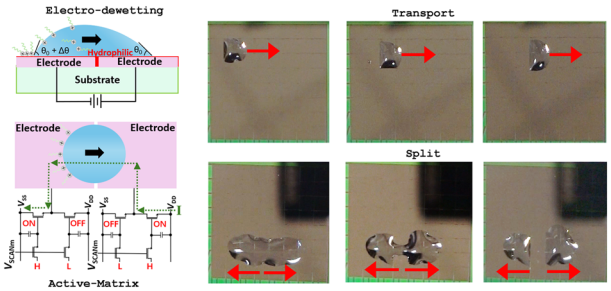
Siyu Liu, Yun Yang, Yifei Yang, Guangfei Wei, Liu Zhou, Jiawei Lin, Zheng Yuan, Yingfei Li, Zhe Wu, Ting Liu* and Guozhuang Zhang*



1850

An active-matrix digital microfluidic device based on surfactant-mediated electro-dewetting

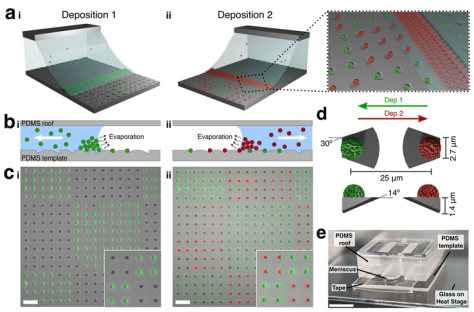
Xinying Xie,* Qining Leo Wang, Runxiao Shi, Tengteng Lei,* Chang-Jin "CJ" Kim and Man Wong



1861

Controlling spatial structure in minimal microbial communities by sequential capillary assembly

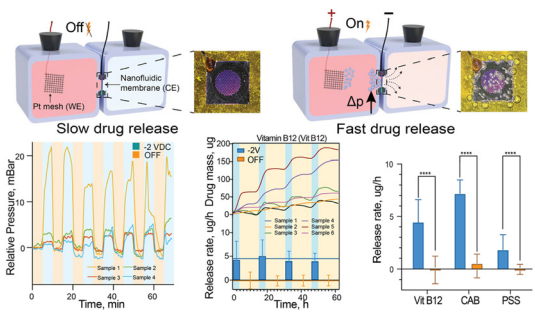
Cameron Boggon, Jeremy P. H. Wong, Arpita Sahoo, Annelies S. Zinkernagel, Markus A. Seeger, Eleonora Secchi* and Lucio Isa*



1874

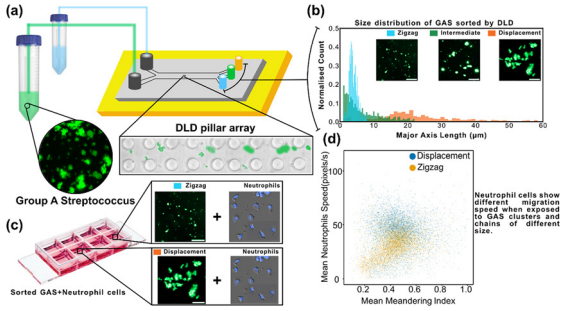
Nanofluidic-based electrochemical pump for remotely controlled, on-demand drug delivery

Marco M. Paci, Nicola Di Trani, Paolo Bolla, Fabiana Del Bono, Takuma Yoshikawa, Isaac Tichy, Patrick S. Stayton and Alessandro Grattoni*



PAPERS

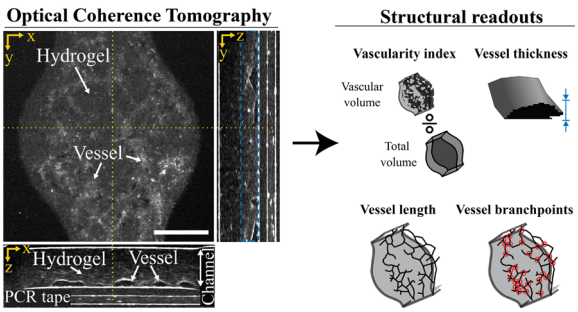
1890



Size-based sorting of dynamic bacterial clusters

Elham Akbari, Jason P. Beech, Johannes Kumra Ahnlide, Sebastian Wrighton, Pontus Nordenfelt and Jonas O. Tegenfeldt*

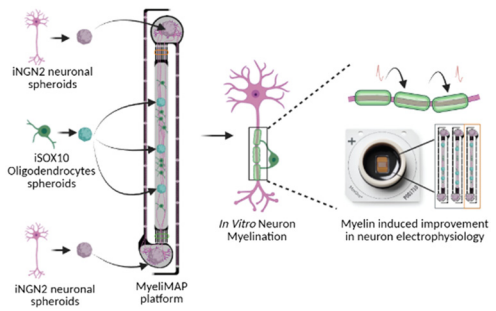
1901



Label-free assessment of a microfluidic vessel-on-chip model with visible-light optical tomography reveals structural changes in vascular networks

Devin Veerman,* Carlos Cuartas-Vélez, Tarek Gensheimer, Tomas van Dorp, Andries van der Meer and Nienke Bosschaart*

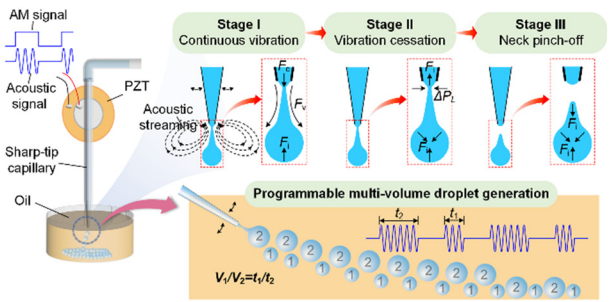
1915



MyeliMAP: a microfluidic-multielectrode array hybrid platform to investigate oligodendrocyte function in human iPSC derived brain-like networks

Karan Ahuja,* Blandine F. Clément, Giulia Amos, Joël Küchler, Keimpe Wierda, Yoke Chin Chai, Lieve Moons and Catherine Verfaillie*

1930



Systematic characterization and mechanistic insights into ultrasonically actuated sharp-tip capillary droplet generation

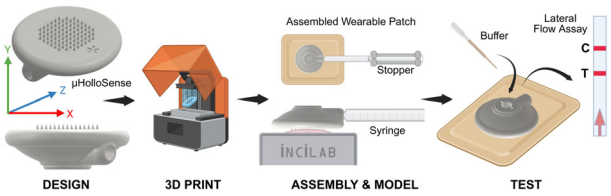
Qi Zhang, Li Ran and Gang Li*

PAPERS

1943

A wearable 3D-printed hollow microneedle device for pressure-driven interstitial fluid collection and testing

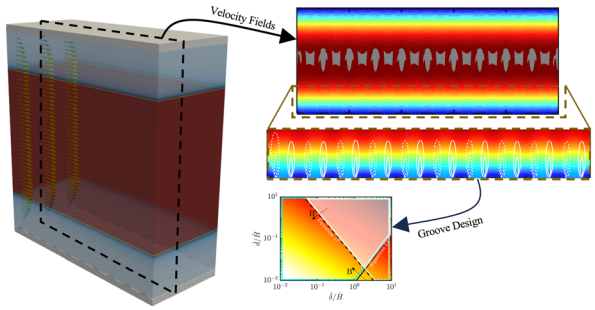
Nedim Hacıosmanoğlu, Emre Ece and Fatih Inci*



1958

Two-phase simulations of viscoplastic flow in superhydrophobic microchannels: interface stability, plug dynamics, and drag reduction

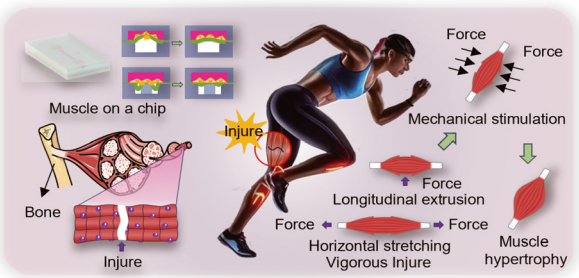
Amir Joulaei, Hossein Rahmani and Seyed Mohammad Taghavi*



1980

Muscle regeneration on a chip: exercise-induced microtrauma and optimal mechanical stimulation regimen

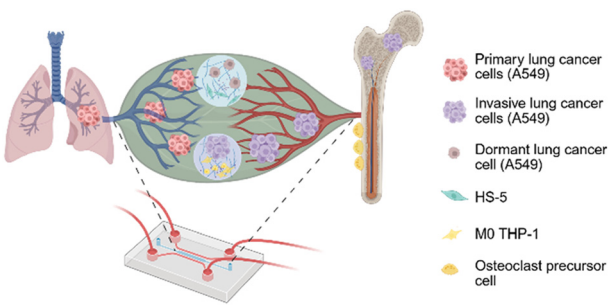
Hongze Yin, Juan Zhang, Jing Zhou, Hui ying Yang, Jiahao Wang, Yue Wang, Na Liu and Tao Yue*



1996

Bone-on-leaf-chip for the study of lung cancer bone metastasis

Qi Liu, Di Suo, Renxian Wang, Shuai Zhao, Mao Mao, Wei-Ning Lee, Yuhe Yang* and Xin Zhao*



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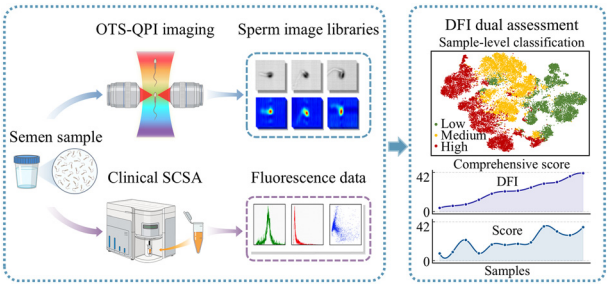
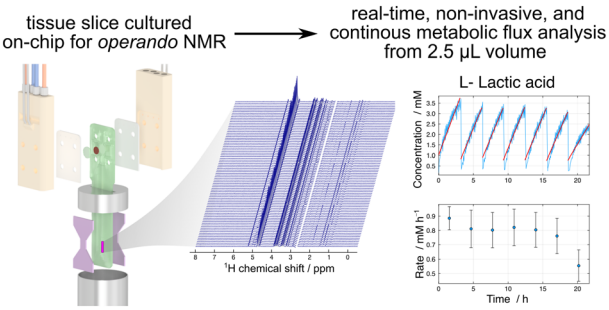
2012



High-throughput label-free assessment of sperm DNA fragmentation index *via* intelligent morphological imaging

Yan Jin, Yujie Zou, Yueyun Weng,* Zhaoyi Ye, Xiaoyang Chen, Zhengwu Liu, Tailang Yin, Sheng Liu, Yan Zhang* and Cheng Lei*

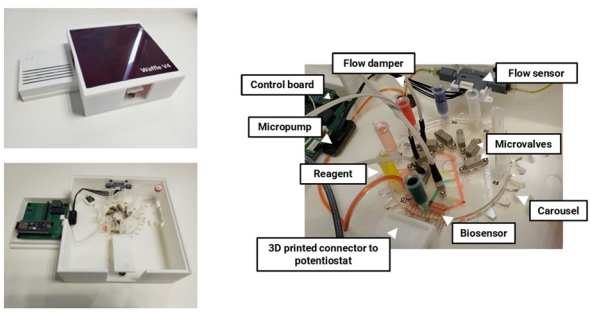
2023



Microfluidic NMR for *operando* monitoring of drug-induced metabolic fluxes in liver tissue slices

Sylwia J. Barker, Bishnubrata Patra, Manvendra Sharma, Annamarija Raic, Ruby E. H. Karsten, Elisabeth Verpoorte and Marcel Utz*

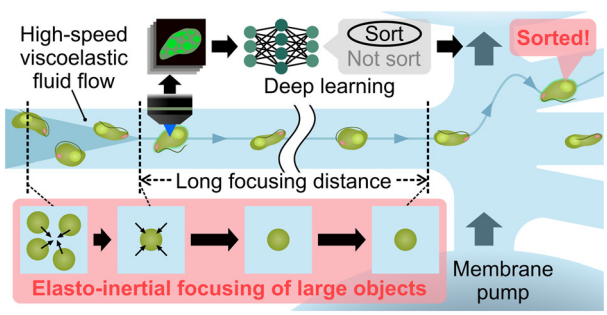
2035



WAFFLE – an automated platform for enhancing the performance of electrochemical biosensors

Alexandra Dobrea,* Rowan Blake, Daniel Macdonald, Cormack McKenzie, Yoann Altmann, Damion K. Corrigan and Melanie Jimenez

2047



Intelligent image-activated sorting of large cells enabled by elasto-inertial focusing

Yuzuki Nagasaka, Akihiro Isozaki, Hiroki Matsumura, Natsumi Tiffany Ishii, Norah Roels, Mina Rassuli, Kelvin C. M. Lee, Walker Peterson, Tianben Ding* and Keisuke Goda*

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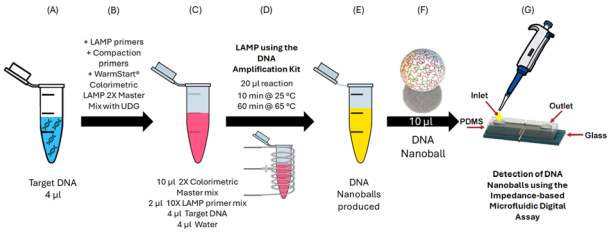

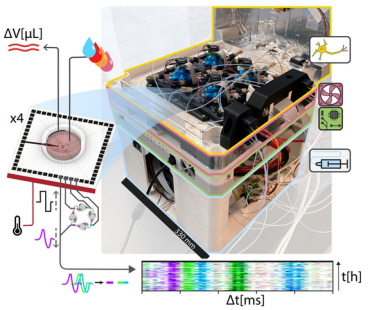

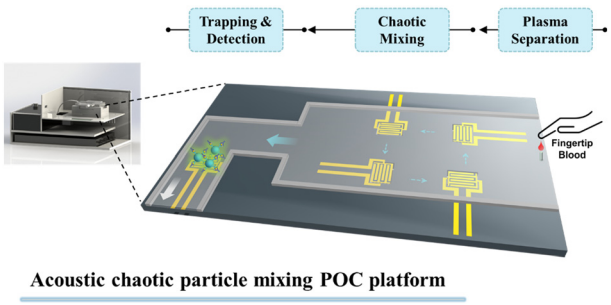

CORRECTION