

Lab on a Chip

Devices and applications at the micro- and nanoscale
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See Mengxi Wu,
Junshan Liu *et al.*,
pp. 5150–5161.
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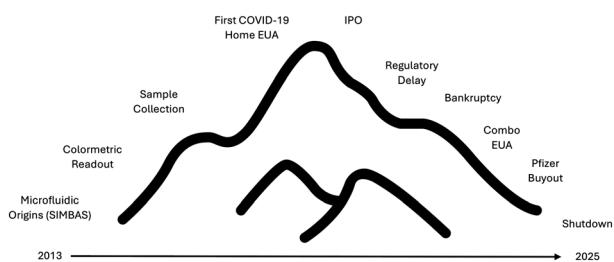
See Yu-Hsiang Hsu *et al.*,
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From startup to shutdown: the dramatic rise and fall of the first at-home combo test for flu and COVID-19

Morgan N. Greenleaf, Gregory L. Damhorst,
Eric M. Vogel, Greg S. Martin and Wilbur A. Lam*

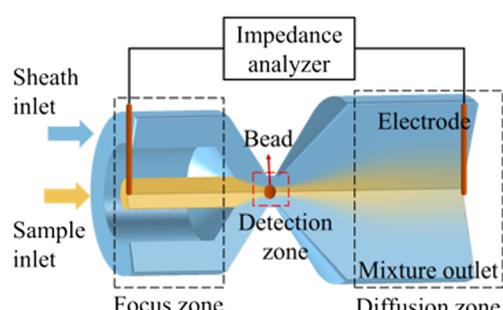


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A high-sensitivity and clogging-free microfluidic impedance flow cytometer based on three-dimensional hydrodynamic focusing

Xiao Chen, Tingxuan Fang, Yimin Li, Jie Zhang,
Xiaoye Huo, Junbo Wang, Xuzhen Qin, Yueying Li,*
Yi Zhang* and Jian Chen*



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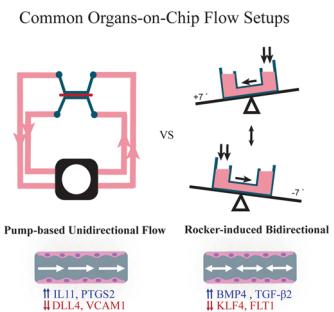


COMMUNICATIONS

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Rocker or pump? Transcriptomic response of endothelial cells exposed to peristaltic pump-based unidirectional flow vs. rocker-induced bidirectional flow

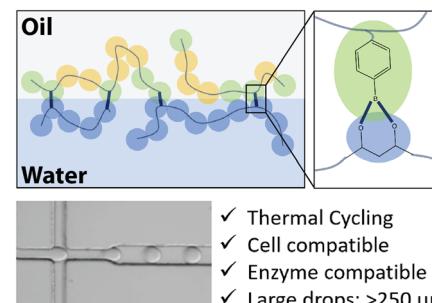
Negar Vahdani, Prateek Arora, Lisette van Os, Denise Ackermann, Nadia Mercader and Olivier T. Guenat*



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Brendan T. Deveney, John A. Heyman, Raoul G. Rosenthal, David A. Weitz and Jörg G. Werner*

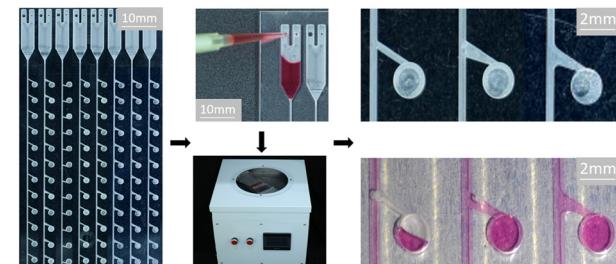


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Analysis of and methods for void-free liquid filling of blind microchambers in centrifugal microfluidics

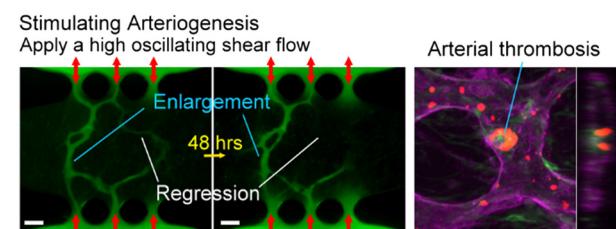
Weiyao Ni, Yi Gao, Enming Cui, Yifei Li, Yangyang Wang, Yahua Liu, Yi Li, Mengxi Wu* and Junshan Liu*



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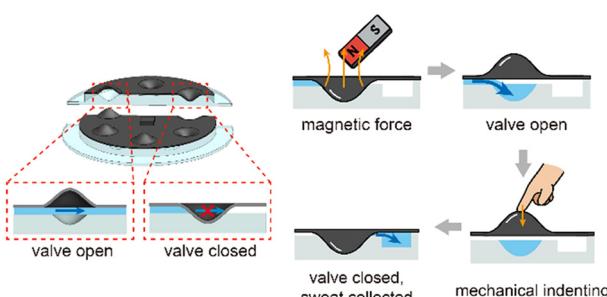
Self-assembled human arteriole-on-a-chip for arterial functionality testing and disease modeling

Subhashree Shivani, Hsin-Jou Wang, Yi-Ting Chen, Chih-Ting Lin and Yu-Hsiang Hsu*



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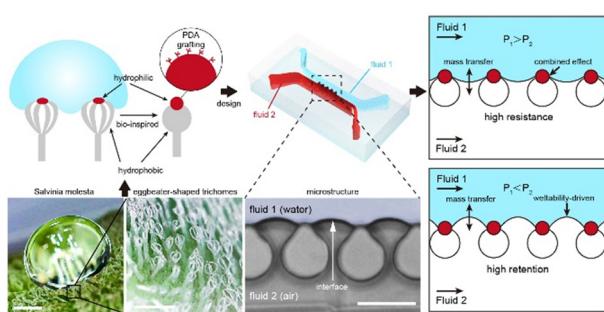
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Chaemin Kim, Chanyong Shin, Anna Lee,* Jonghyun Ha* and Jungil Choi*

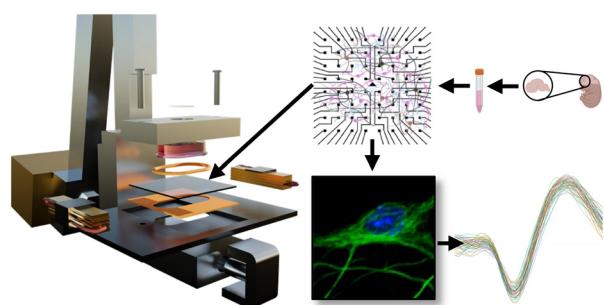
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Salvinia-inspired architectures for enhancing interface stability and mass transfer in microchannels

Jinlong Xu, Yongjian Li* and Haosheng Chen*

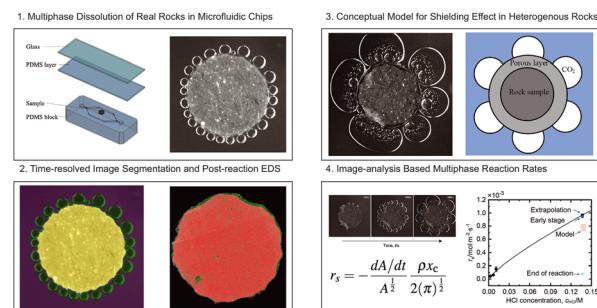
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Junyoung Hwang, Siqin Yu, Cynthia M. Ross and Ilenia Battiato*

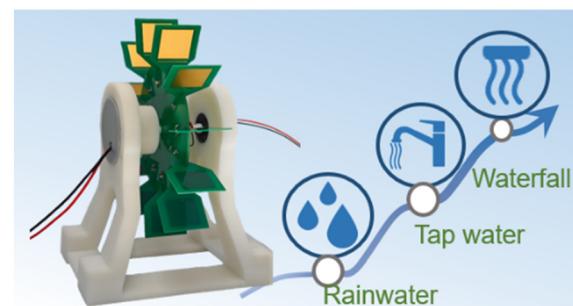


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A hybrid flowing water-based energy generator inspired by a rotatable waterwheel

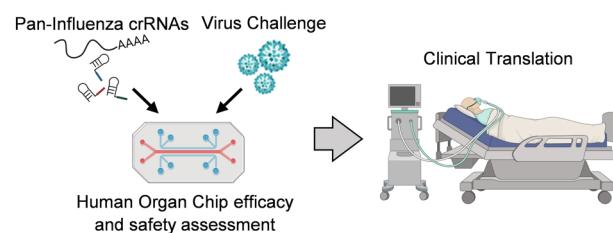
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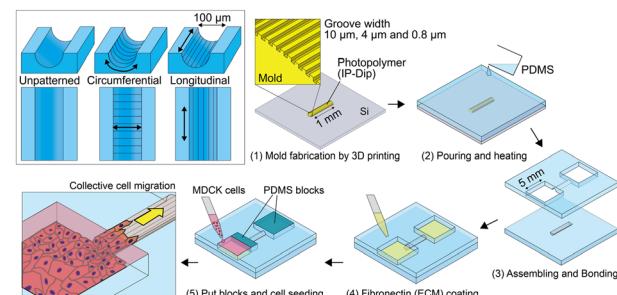
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Topographic cues regulate collective cell dynamics in curved nano/microgrooved tubular microchannels

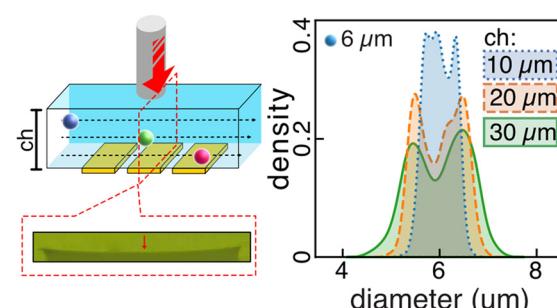
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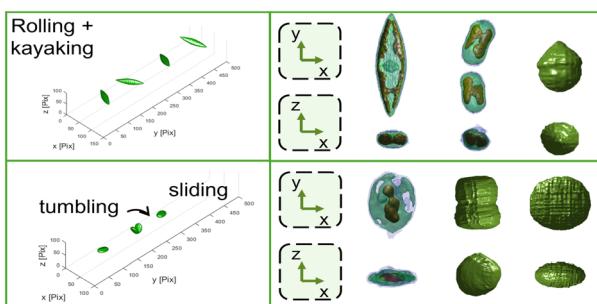
A long-term universal impedance flow cytometry platform empowered by adaptive channel height and real-time clogging-release strategy

Trisna Julian, Tao Tang*, Naomi Tanga, Yang Yang, Yoichiro Hosokawa and Yaxiaer Yalikun*



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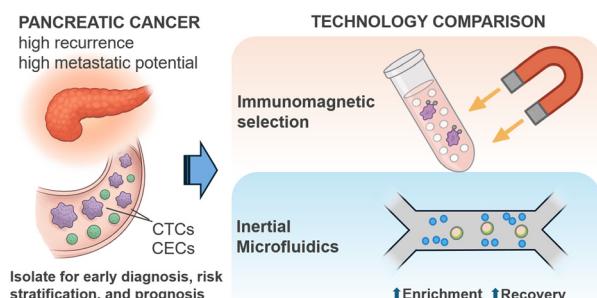
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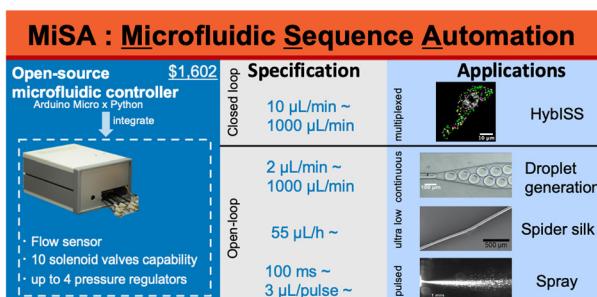
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Benchmarking microfluidic and immunomagnetic platforms for isolating circulating tumor cells in pancreatic cancer

Celine Macaraniag, Ifra Khan, Alexandra Barabanova, Valentina Valle, Jian Zhou, Pier C. Julianotti, Alain Borgeat, Gina Votta-Velis* and Ian Papautsky*

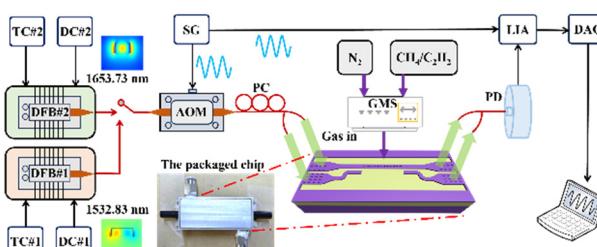
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An open source for multiplexed, stable and transient flows to advance life sciences using microfluidic control automation

Junichi Murai, Mahmoud N. Abdelmoez, Keisuke Kondo, Kohei Takamuro, Keiji Nozaki, Tim Schiller, Thomas R. Scheibel, Keiji Numata, Hisano Yajima, Kanako Terakado Kimura, Takao Hashiguchi, Taikopaul Kaneko, Misa Minegishi and Hirofumi Shintaku*

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On-chip near-infrared gas sensing based on slow light mode multiplexing in photonic crystal waveguides

Zihang Peng, Yuting Min, Mingquan Pi, Kaiyuan Zheng*, Fang Song, Lei Liang, Yiding Wang, Yu Zhang, Xue Bai and Chuantao Zheng*

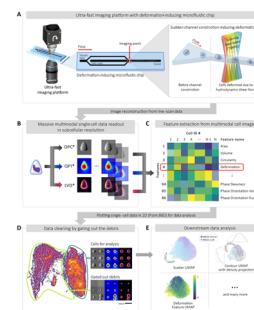


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High-throughput multimodal optofluidic biophysical imaging cytometry

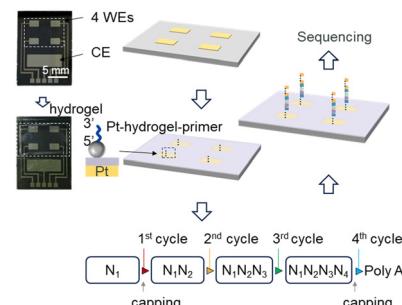
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Electrically controlled deprotection chemistry for multiplex enzymatic DNA synthesis on a chip with single-base resolution

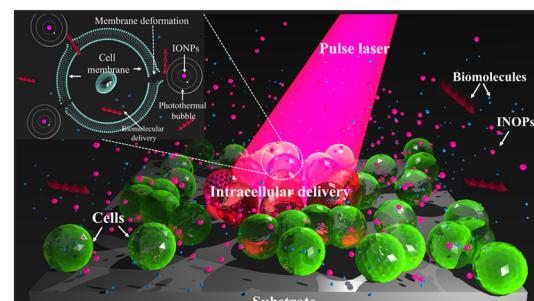
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Microfluidic synthesis of iron oxide nanoparticles for highly efficient intracellular delivery in stem cells and cancer cells

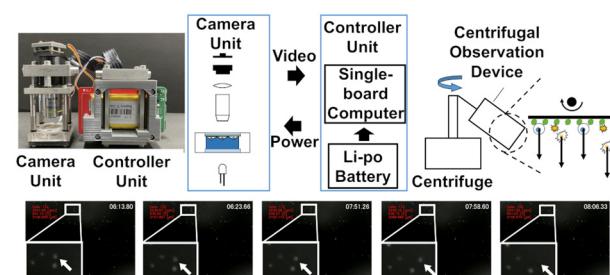
Athira Prasad, Gayathri. R, Nandhini. B, R. Jayaganthan, Srabani Kar and Tuhin Subhra Santra*



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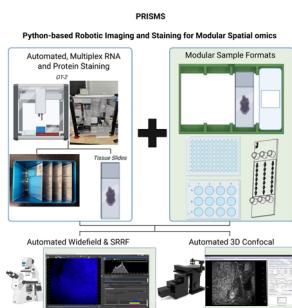
Adhesion-based cell sorting platform using on-chip centrifugation

Mao Otake,* Takaaki Abe, Yoshiaki Ukita and Hiromi Miyoshi



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Modular, open-sourced multiplexing for democratizing spatial omics

Nicholas Zhang, Zhou Fang, Priyam Kadakia, Jamie Guo, Dakshin Vijay, Manoj Thapa, Samuel Dembowitz, Arash Grakoui and Ahmet F. Coskun*

CORRECTION

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Correction: A nanobody-based microfluidic chip for fast and automated purification of protein complexes

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