

# Lab on a Chip

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

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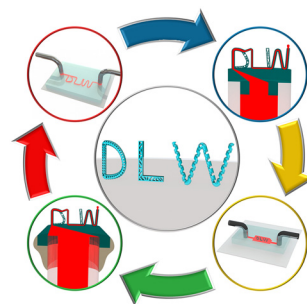
**Cover**  
See Lei Zhang *et al.*,  
pp. 2418–2427.  
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*Lab Chip*, 2024, 24, 2418.

## TUTORIAL REVIEW

2371

### Direct laser writing-enabled 3D printing strategies for microfluidic applications

Olivia M. Young, Xin Xu, Sunandita Sarker and Ryan D. Sochol\*

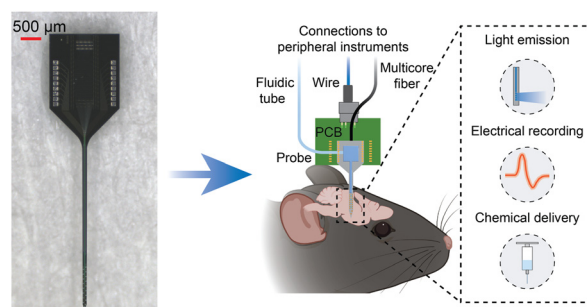


## PERSPECTIVE

2397

### Development of wafer-scale multifunctional nanophotonic neural probes for brain activity mapping

Fu Der Chen,\* Ankita Sharma, David A. Roszko, Tianyuan Xue, Xin Mu, Xianshu Luo, Hongyao Chua, Patrick Guo-Qiang Lo, Wesley D. Sacher and Joyce K. S. Poon\*





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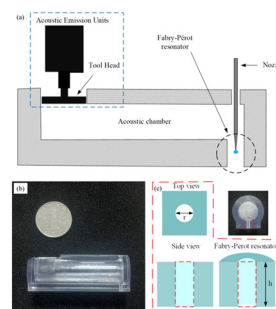
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2418

## Acoustic modulation and non-contact atomization of droplets based on the Fabry–Pérot resonator

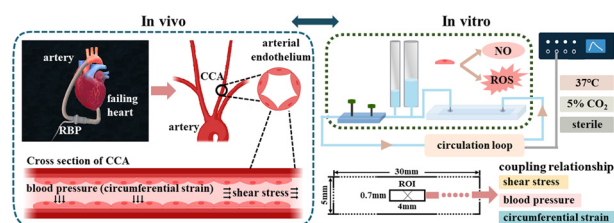
Jingjun Li, Xiukun Wang, Fan Yang, Yadong Sun and Lei Zhang\*



2428

## Study on the hemodynamic effects of different pulsatile working modes of a rotary blood pump using a microfluidic platform that realizes *in vitro* cell culture effectively

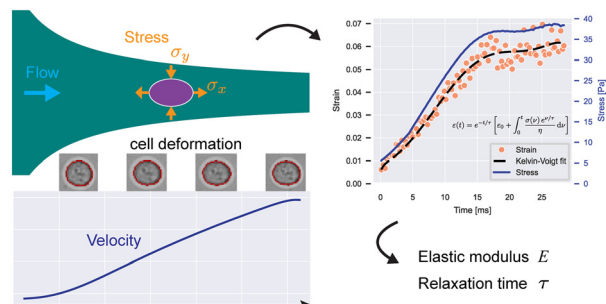
Lixue Liang, Xueying Wang, Dong Chen, Palaniappan Sethu, Guruprasad A. Giridharan, Yanxia Wang, Yu Wang\* and Kai-Rong Qin\*



2440

## High-throughput viscoelastic characterization of cells in hyperbolic microchannels

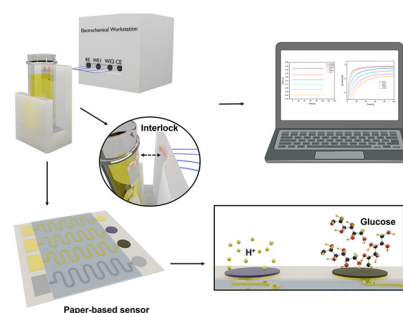
Felix Reichel, Ruchi Goswami, Salvatore Girardo and Jochen Guck\*



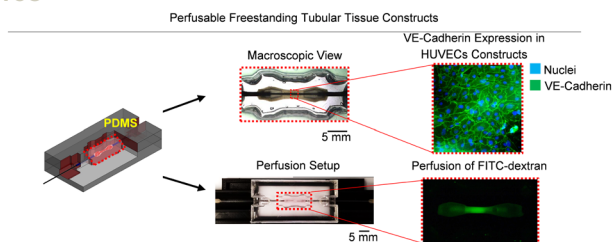
2454

## A paper-based dual functional biosensor for safe and user-friendly point-of-care urine analysis

Yujia Li, Yingqi Kong, Yubing Hu, Yixuan Li, Rica Asrosa, Wenyu Zhang, Buddha Deka Boruah, Ali K. Yetisen, Andrew Davenport, Tung-Chun Lee and Bing Li\*



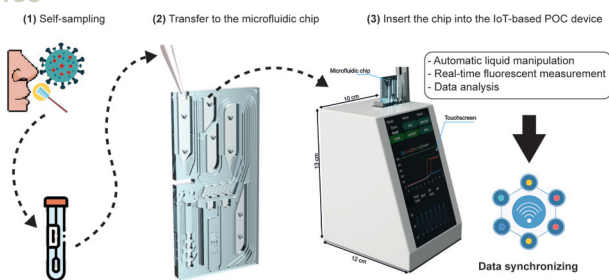
2468



## A self-assembly and cellular migration based fabrication of high-density 3D tubular constructs of barrier forming membranes

Seyedaydin Jalali  
and Ponnambalam Ravi Selvaganapathy\*

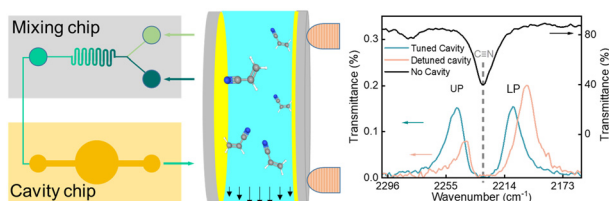
2485



## Development of a self-contained microfluidic chip and an internet-of-things-based point-of-care device for automated identification of respiratory viruses

Huynh Quoc Nguyen, Van Dan Nguyen, Vu Minh Phan  
and Tae Seok Seo\*

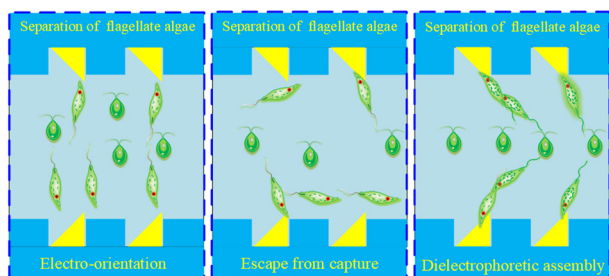
2497



## Piezoelectric and microfluidic tuning of an infrared cavity for vibrational polariton studies

Wei Wang, Jaime de la Fuente Diez, Nicolas Delsuc,  
Juan Peng, Riccardo Spezia, Rodolphe Vuilleumier  
and Yong Chen\*

2506



## Dielectrophoretic characterization and selection of non-spherical flagellate algae in parallel channels with right-angle bipolar electrodes

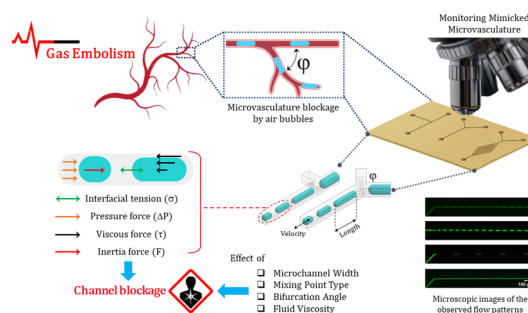
Xiaoming Chen,\* Shun Liu, Mo Shen, Jishun Shi,  
Chungang Wu, Zhipeng Song and Yong Zhao\*



2518

## Investigation of air bubble behaviour after gas embolism events induced in a microfluidic network mimicking microvasculature

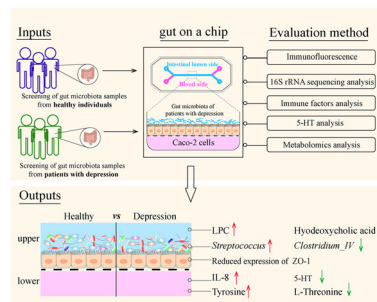
Mohammad Mahdi Mardanpour, Ayyappasamy Sudalaiyadum Perumal, Zahra Mahmoodi, Karine Baassiri, Gala Montiel-Rubies, Kenneth M. LeDez and Dan V. Nicolau\*



2537

## A microfluidic-based gut-on-a-chip model containing the gut microbiota of patients with depression reveals physiological characteristics similar to depression

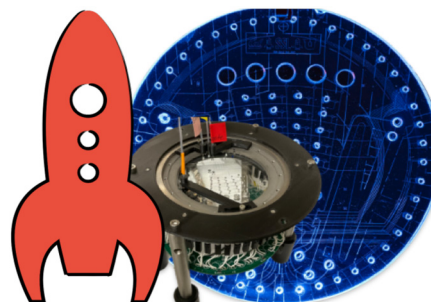
Wenxin Wang, Yiyuan Liu, Zhikai Yao, Dengbo Chen, Yue Tang, Jingwei Cui, Jiangjiang Zhang, Hong Liu\* and Zikai Hao\*



2551

## Integrated high performance microfluidic organic analysis instrument for planetary and space exploration

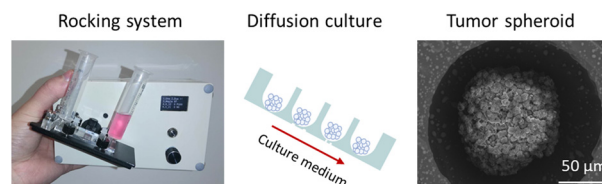
Anna L. Butterworth\*, Matin Golozar, Zachary Estlack, Jeremy McCauley, Richard A. Mathies and Jungkyu Kim\*



2561

## Rocking- and diffusion-based culture of tumor spheroids-on-a-chip

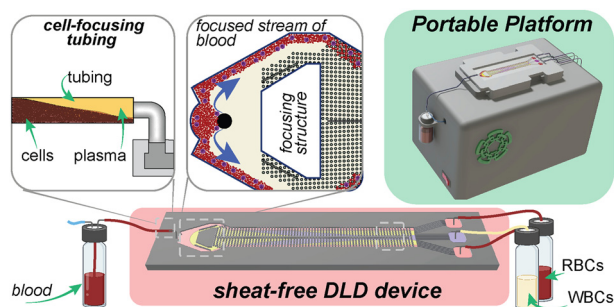
Duomei Tian, Zheng Mao, Li Wang, Xiaochen Huang, Wei Wang, Haoyue Luo, Juan Peng\* and Yong Chen\*





## PAPERS

2575



### Portable platform for leukocyte extraction from blood using sheath-free microfluidic DLD

Oriana G. Chavez-Pineda, Roberto Rodriguez-Moncayo, Alan M. Gonzalez-Suarez, Pablo E. Guevara-Pantoja, Jose L. Maravillas-Montero and Jose L. Garcia-Cordero\*

## CORRECTION

2590

### Correction: Direct laser writing-enabled 3D printing strategies for microfluidic applications

Olivia M. Young, Xin Xu, Sunandita Sarker and Ryan D. Sochol\*

