

Lab on a Chip

Devices and applications at the micro- and nanoscale
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Cover

See Wenming Liu *et al.*,
pp. 2161–2174.

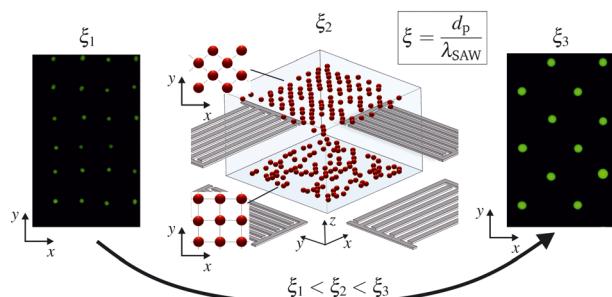
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COMMUNICATION

2154

From rectangular to diamond shape: on the three-dimensional and size-dependent transformation of patterns formed by single particles trapped in microfluidic acoustic tweezers

Zhichao Deng, Vijay V. Kondalkar, Christian Cierpka,
Hagen Schmidt* and Jörg König*

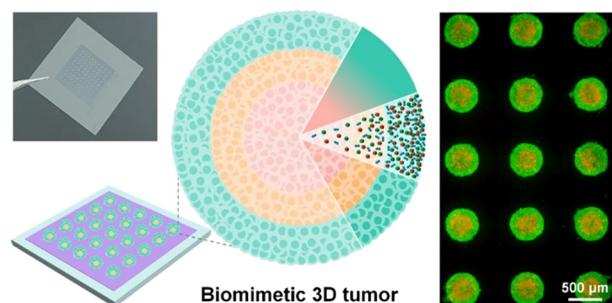


PAPERS

2161

Facile construction of a 3D tumor model with multiple biomimetic characteristics using a micropatterned chip for large-scale chemotherapy investigation

Meilin Sun, Jinwei Zhang, Wenzhu Fu, Tingting Xuanyuan
and Wenming Liu*



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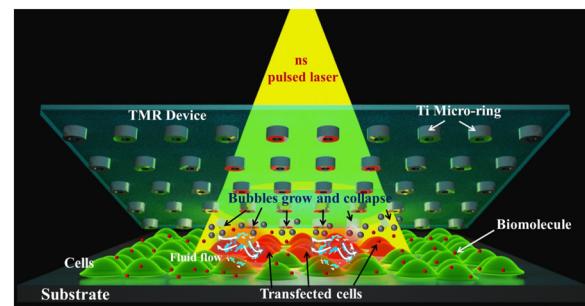
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PAPERS

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Metallic micro-ring device for highly efficient large cargo delivery in mammalian cells using infrared light pulses

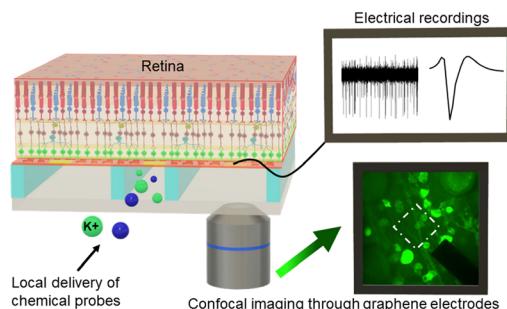
Ashwini Shinde, Pallavi Shinde, Srabani Kar, Kavitha Illath, Souvik Dey, Nitish R. Mahapatra, Moeto Nagai and Tuhin Subhra Santra*



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Graphene-based microfluidic perforated microelectrode arrays for retinal electrophysiological studies

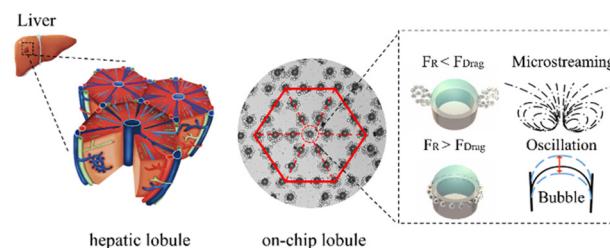
Alberto Esteban-Linares, Xiaosi Zhang, Hannah H. Lee, Michael L. Risner, Sharon M. Weiss, Ya-Qiong Xu, Edward Levine* and Deyu Li*



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Heterogeneous tissue construction by on-demand bubble-assisted acoustic patterning

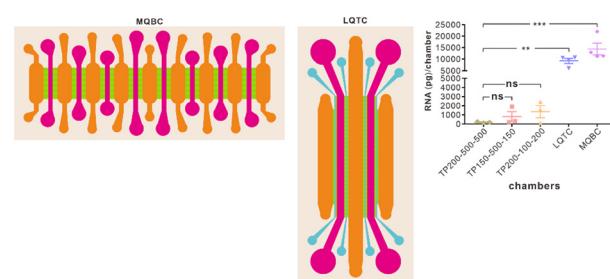
Qinghao Hu, Xuejia Hu, Yang Shi, Li Liang, Jiaomeng Zhu, Shukun Zhao, Yifan Wang, Zezheng Wu, Fubing Wang, Fuling Zhou and Yi Yang*



2217

Facilitation of axonal transcriptome analysis with quantitative microfluidic devices

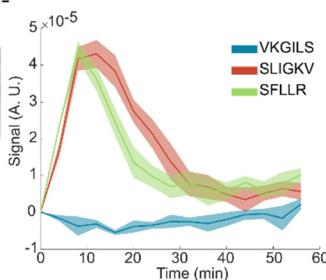
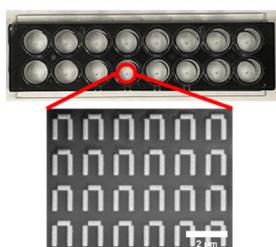
Zhuoxuan Yang, Jun Yu, Jian Zhang, Huixue Song, Haixia Ye, Jianhui Liu, Nijia Wang, Pengfei Che, Gaoxin Long, Yunxuan Wang, Jaewon Park* and Sheng-Jian Ji*



PAPERS

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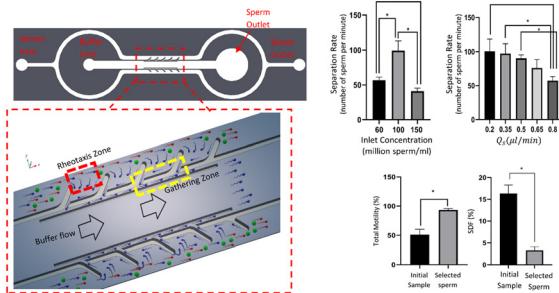
Mid-IR metasurface in 16-well cell culture chamber



Metasurface-enhanced infrared spectroscopy in multiwell format for real-time assaying of live cells

Steven H. Huang,* Giovanni Sartorello, Po-Ting Shen, Chengqi Xu, Olivier Elemento* and Gennady Shvets*

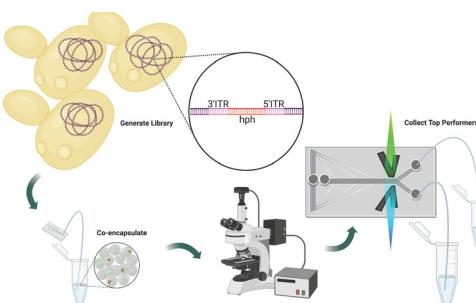
2241



High-DNA integrity sperm selection using rheotaxis and boundary following behavior in a microfluidic chip

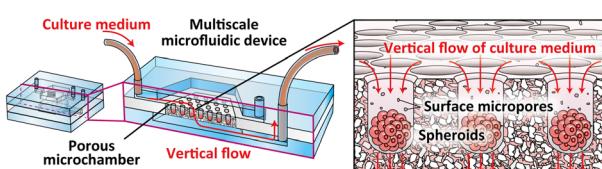
Soroush Zeaei, Mohammad Zabetian Targhi,* Iman Halvaei and Reza Nosrati*

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Temporal sorting of microdroplets can identify productivity differences of itaconic acid from libraries of *Yarrowia lipolytica*

Emily K. Bowman,* Phuong T. Nguyen Hoang, Angela R. Gordillo Sierra, Karoline M. Vieira Nogueira and Hal S. Alper

2257



A multiscale, vertical-flow perfusion system with integrated porous microchambers for upgrading multicellular spheroid culture

Mai Takagi, Masumi Yamada,* Rie Utoh and Minoru Seki

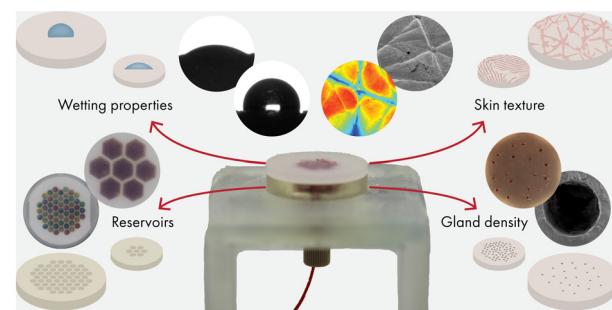


PAPERS

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A versatile artificial skin platform for sweat sensor development

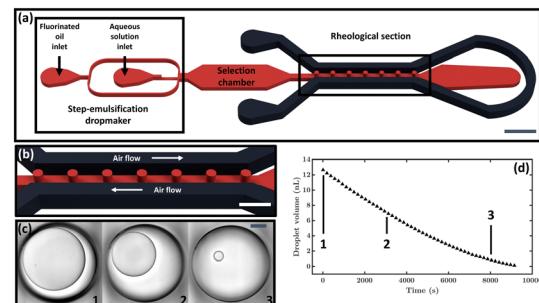
Emma J. M. Moonen, Tanveer ul Islam, Sebastiaan van Kemenade, Eduard Pelssers, Jason Heikenfeld and Jaap M. J. den Toonder*



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Droplet-based microfluidic platform for viscosity measurement over extended concentration range

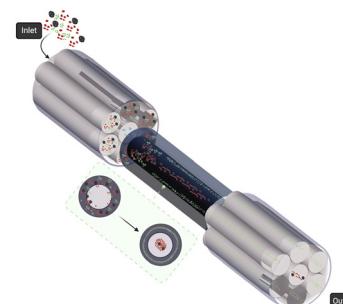
Paul Cochard-Marchewka,* Nicolas Bremond and Jean Baudry



2286

Lab-in-a-fiber-based integrated particle separation and counting

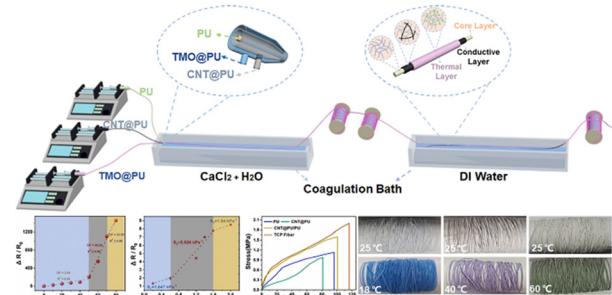
T. Kumar, A. V. Harish, S. Etcheverry, W. Margulis, F. Laurell and A. Russom*



2294

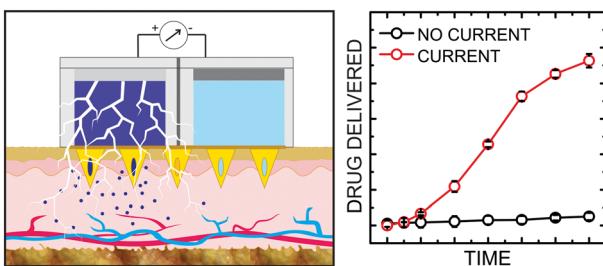
Flexible coaxial composite fiber based on carbon nanotube and thermochromic particles for multifunctional sensor and wearable electronics

Ningle Hou, Hui Wang, Aijia Zhang, Ling Li,* Xiaoting Li* and Wenming Zhang*



PAPERS

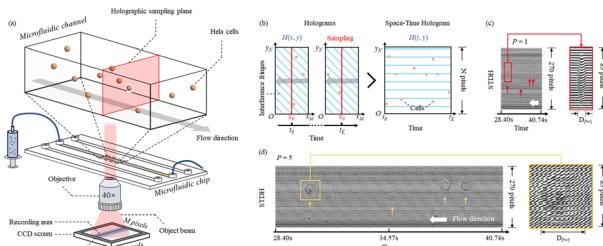
2304



Transferdermal on-demand drug delivery based on an iontophoretic hollow microneedle array system

Usanee Detamornrat, Marc Parrilla,* Juan Domínguez-Robles, Qonita Kurnia Anjani, Eneko Larrañeta, Karolien De Wael and Ryan F. Donnelly*

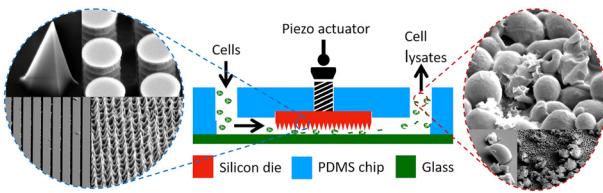
2316



Holographic flow scanning cytometry overcomes depth of focus limits and smartly adapts to microfluidic speed

Zhe Wang, Vittorio Bianco,* Pier Luca Maffettone and Pietro Ferraro

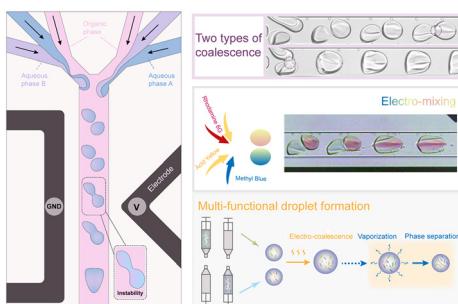
2327



Integration of silicon chip microstructures for in-line microbial cell lysis in soft microfluidics

Pavani Vamsi Krishna Nittala, Allison Hohreiter, Emilio Rosas Linhard, Ryan Dohn, Suryakant Mishra, Abhiteja Konda, Ralu Divan, Supratik Guha and Anindita Basu*

2341



AC-electric-field-controlled multi-component droplet coalescence at microscale

Weidong Fang, Zhi Tao, Haiwang Li, Shuai Yin, Tiantong Xu, Yi Huang* and Teckneng Wong



CORRECTION

2356

Correction: Fully-automated and field-deployable blood leukocyte separation platform using multi-dimensional double spiral (MDDS) inertial microfluidics

Hyungkook Jeon, Bakr Jundi, Kyungyong Choi, Hyunryul Ryu, Bruce D. Levy, Geunbae Lim and Jongyoon Han*

