Lab on a Chip

Devices and applications at the micro- and nanoscale

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See Pouyan E. Boukany *et al.*, pp. 1768–1778.
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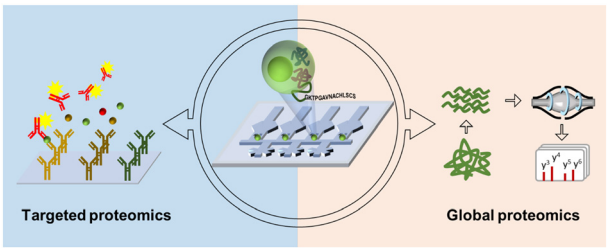
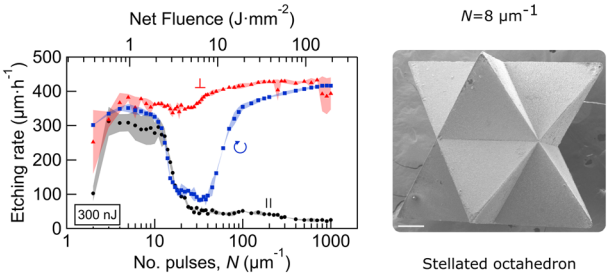
CRITICAL REVIEW



COMMUNICATION



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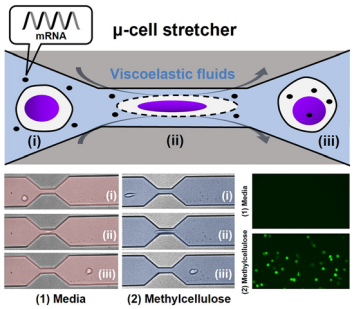

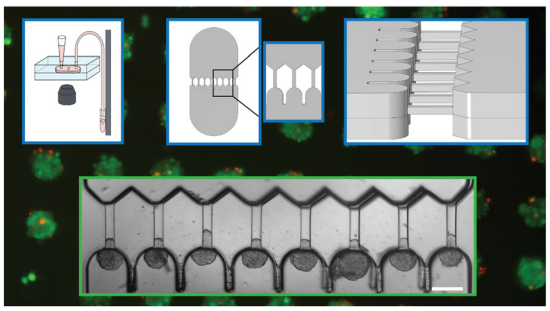

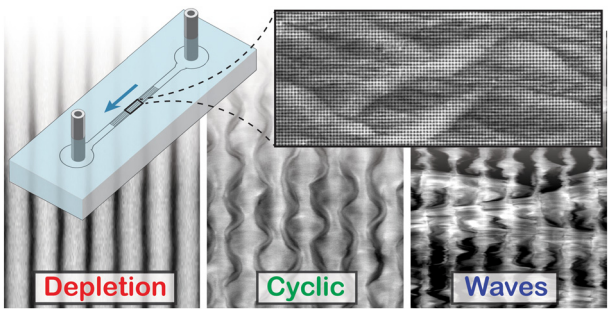

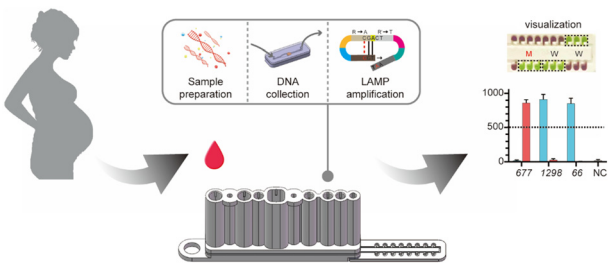

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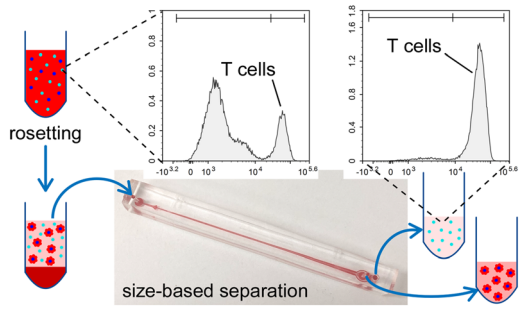
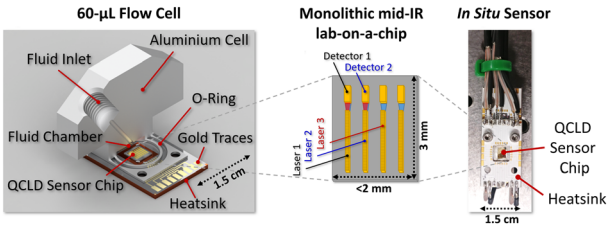
1804



Red blood cell rosetting enables size-based separation of specific lymphocyte subsets from blood in a microfluidic device

Kumar Abhishek, Anto Sam Crosslee Louis Sam Titus, Mai T. P. Dinh, Anton Mukhamedshin, Chandra Mohan, Sean C. Gifford and Sergey S. Shevkoplyas*

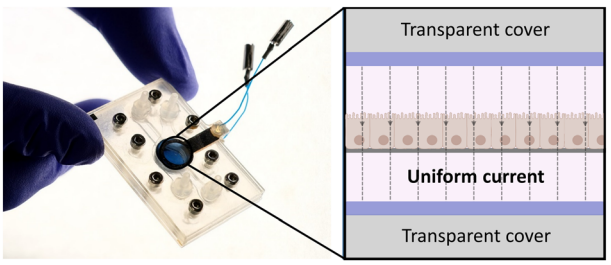
1816



Beyond Karl Fischer titration: a monolithic quantum cascade sensor for monitoring residual water concentration in solvents

Florian Pilat,* Benedikt Schwarz, Bettina Baumgartner, Daniela Ristanić, Hermann Detz, Aaron M. Andrews, Bernhard Lendl, Gottfried Strasser and Borislav Hinkov*

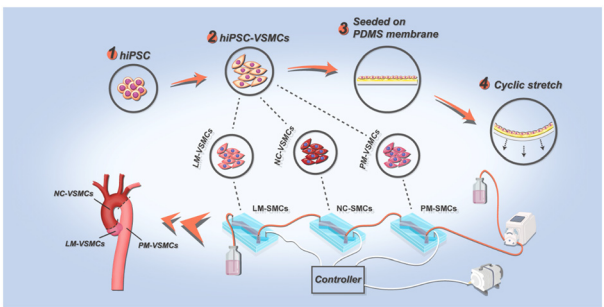
1825



Organ-on-a-chip with integrated semitransparent organic electrodes for barrier function monitoring

Denise Marrero, Anton Guimera, Laure Maes, Rosa Villa, Mar Alvarez* and Xavi Illa*

1835



A hiPSC-derived lineage-specific vascular smooth muscle cell-on-a-chip identifies aortic heterogeneity across segments

Gang Liu, Jun Li, Yang Ming, Bitao Xiang, Xiaonan Zhou, Yabin Chen, Nan Chen, Mieradilijiang Abudupataer, Shichao Zhu, Xiaoning Sun, Yongxin Sun, Hao Lai, Sisi Feng,* Chunsheng Wang* and Kai Zhu*

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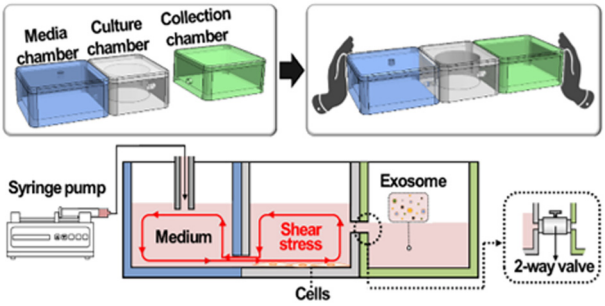
1852

Modularized dynamic cell culture platform for efficient production of extracellular vesicles and sequential analysis

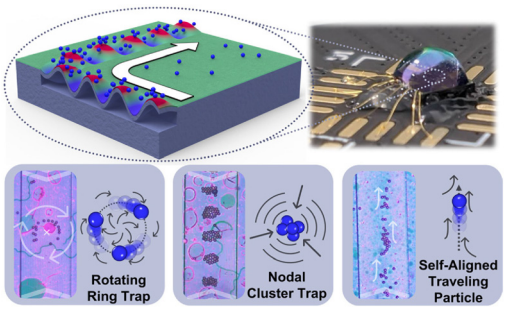
Seo Yeon Kim, Seong Min Ha, Dong-Uk Kim, Junhyun Park, Sunyoung Park, Kyung-A Hyun* and Hyo-Il Jung*



1865

Microfabricated acoustofluidic membrane acoustic waveguide actuator for highly localized in-droplet dynamic particle manipulation

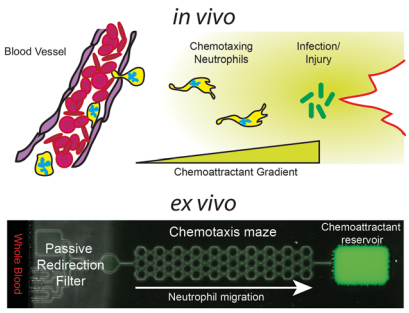
Philippe Vachon,* Srinivas Merugu, Jaibir Sharma, Amit Lal, Eldwin J. Ng, Yul Koh, Joshua E.-Y. Lee and Chengkuo Lee



1879

Passive redirection filters minimize red blood cell contamination during neutrophil chemotaxis assays using whole blood

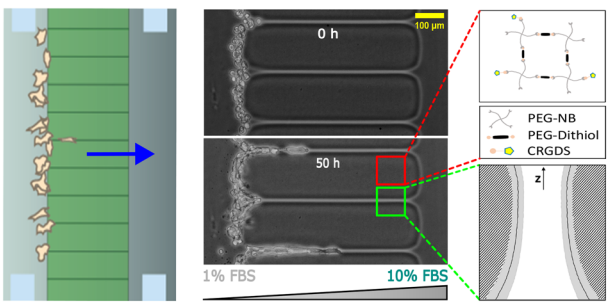
Felix Ellett* and Daniel Irimia*



1886

Photolithographic microfabrication of hydrogel clefts for cell invasion studies

Stefan Stöberl, Miriam Balles, Thomas Kellerer and Joachim O. Rädler*



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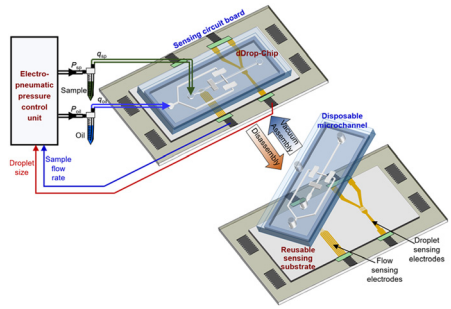
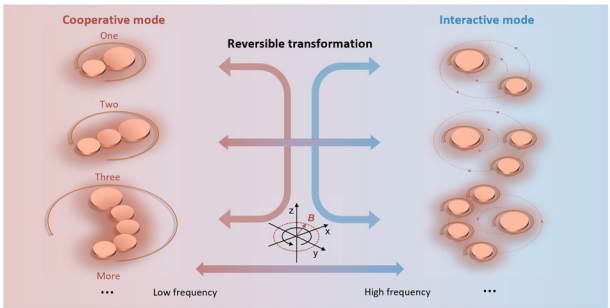
1896



dDrop-Chip: disposable film-chip microfluidic device for real-time droplet feedback control

Jaewook Ryu, Junhyeong Kim and Ki-Ho Han*

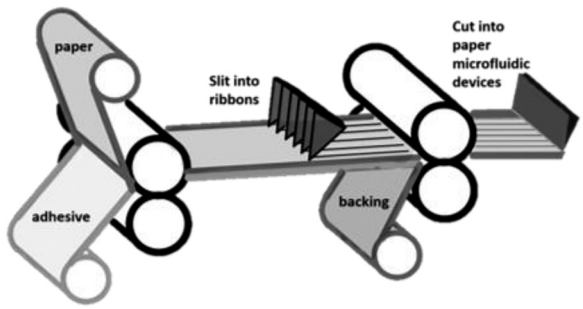
1905



Dynamically reversible cooperation and interaction of multiple rotating micromotors

Shilu Zhu, Yifan Cheng, Jialong Chen, Guangli Liu, Tingting Luo and Runhuai Yang*

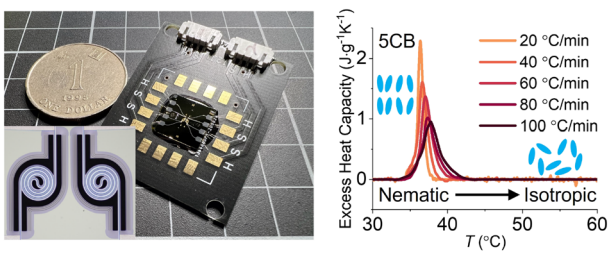
1918



The air-gap PAD: a roll-to-roll-compatible fabrication method for paper microfluidics

Rachel M. Roller, Angela Rea and Marya Lieberman*

1926



Sub-nL thin-film differential scanning calorimetry chip for rapid thermal analysis of liquid samples

Sheng Ni, Hanliang Zhu, Pavel Neuzil and Levent Yobas*

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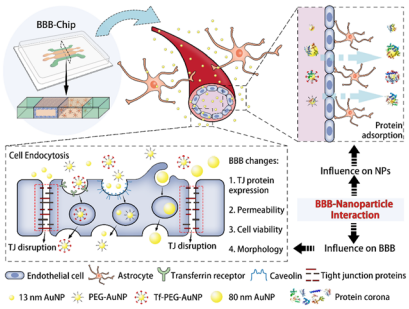

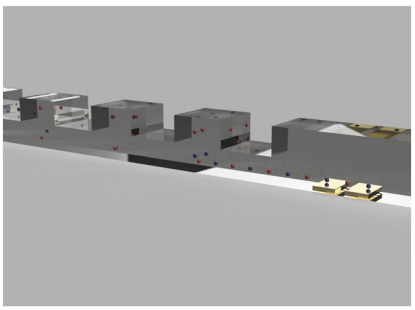

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