

Lab on a Chip

Devices and applications at the micro- and nanoscale
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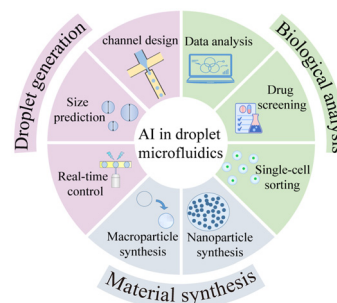
Cover
See Jatin Panwar and Christoph A. Merten, pp. 2514-2520.
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CRITICAL REVIEW

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Functions and applications of artificial intelligence in droplet microfluidics

Huan Liu, Lang Nan, Feng Chen, Yue Zhao and Yongxi Zhao*

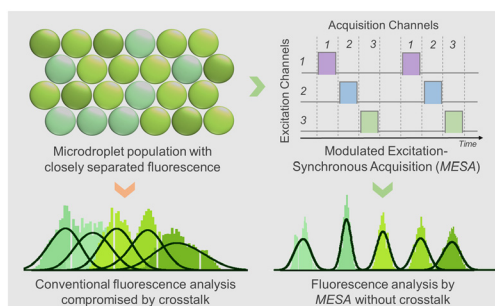


COMMUNICATION

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Fluorescence crosstalk reduction by modulated excitation-synchronous acquisition for multispectral analysis in high-throughput droplet microfluidics

Jatin Panwar and Christoph A. Merten*



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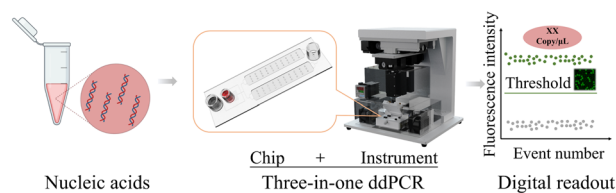
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A three-in-one microfluidic droplet digital PCR platform for absolute quantitative analysis of DNA

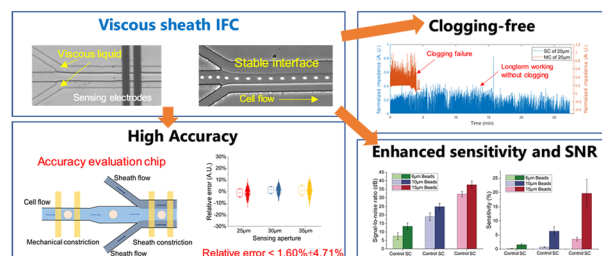
Yulin Ren, Jingcheng Ji, Haoqing Zhang, Lei Cao, Jie Hu, Feng Xu and Zedong Li*



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Performance-enhanced clogging-free viscous sheath constriction impedance flow cytometry

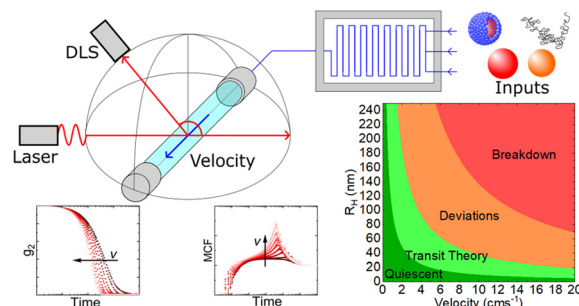
Junwen Zhu, Yongxiang Feng, Huichao Chai, Fei Liang, Zhen Cheng and Wenhui Wang*



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Microfluidic in-line dynamic light scattering with a commercial fibre optic system

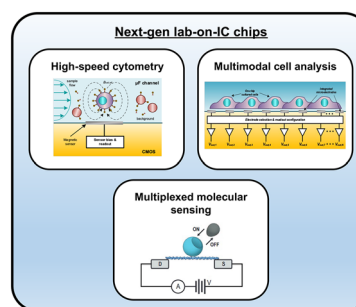
Luis M. G. Torquato, Nelson Hélaïne, Yufan Cui, Roisin O'Connell, Jérémie Gummel, Eric S. J. Robles, David Jacob and João T. Cabral*



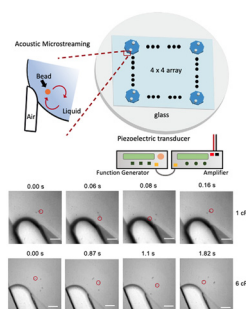
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Vasant Iyer, David A. Issadore and Firooz Aflatouni*



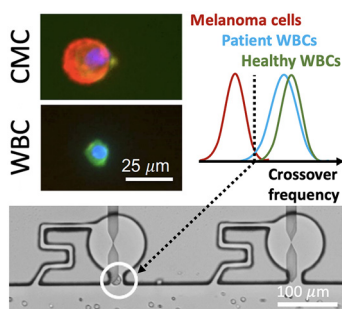
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Microfluidic viscometer by acoustic streaming transducers

Ruoyu Jiang, Paul Yoo, Abhinand M. Sudarshana, Emma Pelegri-O'Day, Sandeep Chhabra, Marissa Mock and Abraham P. Lee*

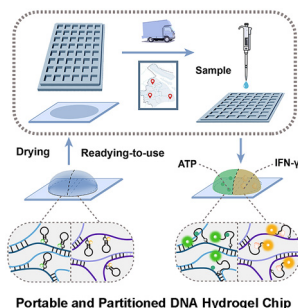
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Quantification of capture efficiency, purity, and single-cell isolation in the recovery of circulating melanoma cells from peripheral blood by dielectrophoresis

Han Chen, Sommer Y. Osman, Devon L. Moose, Marion Vanneste, Jared L. Anderson, Michael D. Henry and Robbyn K. Anand*

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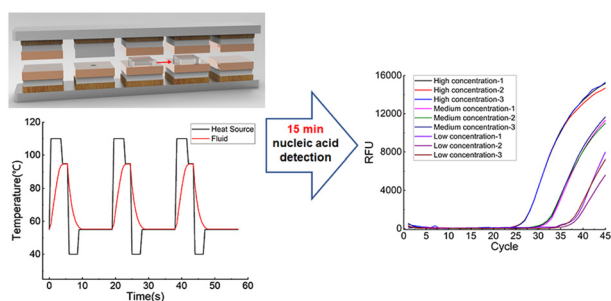


Portable and Partitioned DNA Hydrogel Chip

A portable and partitioned DNA hydrogel chip for multitarget detection

Yi Guo, Wenxing Li, Runchi Zhang, Siyu Cao, Xiaoli Zhu,* Guifang Chen* and Chang Feng*

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Ultra-fast, sensitive and low-cost real-time PCR system for nucleic acid detection

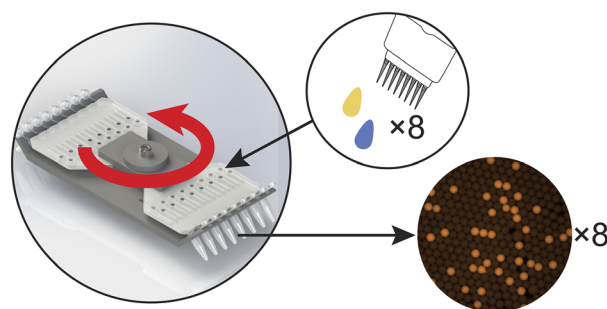
Shaolei Huang, Yiquan An, Bangchao Xi, Xianglian Gong, Zhongfu Chen, Shan Shao, Shengxiang Ge, Jun Zhang, Dongxu Zhang* and Ningshao Xia*



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Interfacing centrifugal microfluidics with linear-oriented 8-tube strips and multichannel pipettes for increased throughput of digital assays

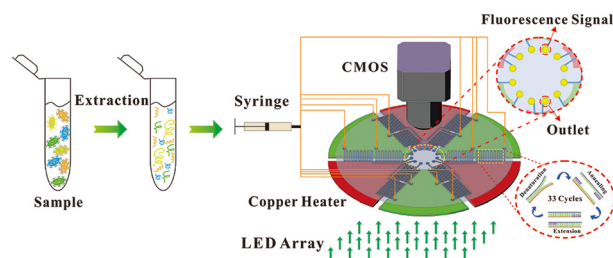
Yu-Kai Lai, Yu-Ting Kao, Jacob Friedrich Hess, Silvia Calabrese, Felix von Stetten and Nils Paust*



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Simultaneous amplification of DNA in a multiplex circular array shaped continuous flow PCR microfluidic chip for on-site detection of bacterial

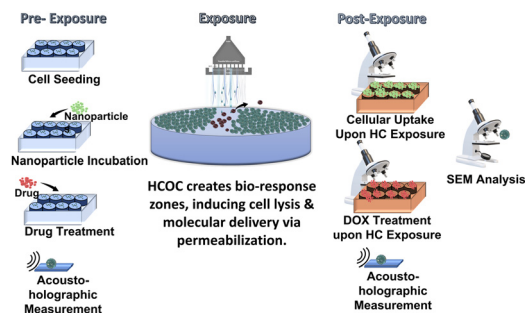
Bo Yang, Ping Wang, Zhenqing Li,* Qingxiang You, Shinichi Sekine, Junshan Ma, Songlin Zhuang, Dawei Zhang* and Yoshinori Yamaguchi*



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On the application of hydrodynamic cavitation on a chip in cellular injury and drug delivery

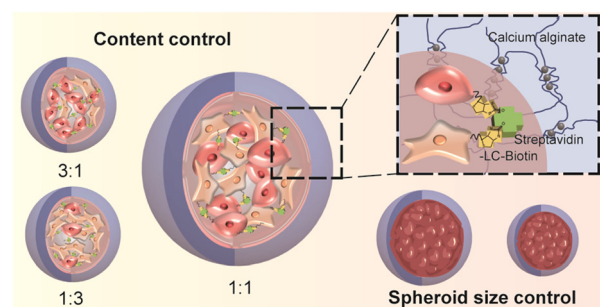
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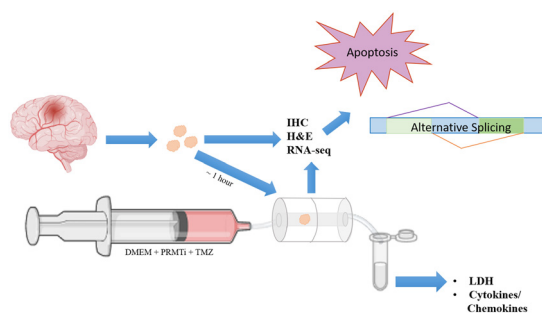


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Multidimensional controllable fabrication of tumor spheroids based on a microfluidic device

Ying Hou, Yajing Zheng, Xiaonan Zheng, Yucheng Sun, Xizhen Yi, Zengnan Wu and Jin-Ming Lin*





Investigating the effects of arginine methylation inhibitors on microdissected brain tumour biopsies maintained in a miniaturised perfusion system

Antonia Barry, Sabrina F. Samuel, Ines Hosni, Amr Moursi, Lauric Feugere, Christopher J. Sennett, Srihari Deepak, Shailendra Achawal, Chittoor Rajaraman, Alexander Iles, Katharina C. Wollenberg Valero, Ian S. Scott, Vicky Green, Lucy F. Stead, John Greenman, Mark A. Wade* and Pedro Beltran-Alvarez*

