

Lab on a Chip

Devices and applications at the micro- and nanoscale
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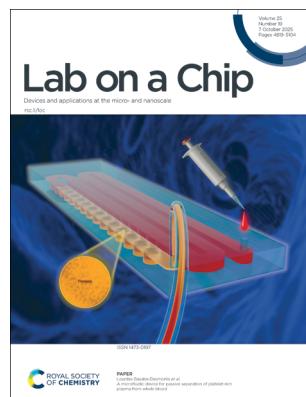
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See Manuel Schröter, Andreas Hierlemann et al., pp. 4844–4885.
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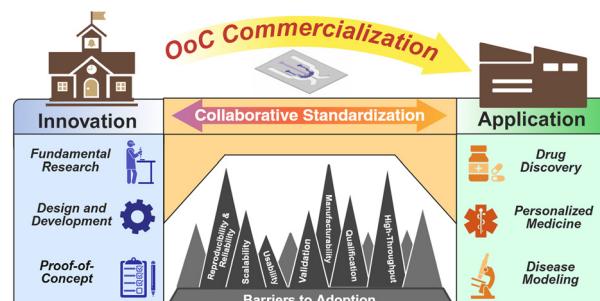
See Lourdes Basabe-Desmonts et al., pp. 4886–4897.
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Ronin-Mae Komarnisky, Shaun Wootten, Nathan Friedman and Mehdi Nikkhah*



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Advances in large-scale electrophysiology with high-density microelectrode arrays

Manuel Schröter,* Fernando Cardes, Cat-Vu H. Bui, Lorenzo Davide Dodi, Tobias Gänsswein, Julian Bartram, Lorenca Sadiraj, Philipp Hornauer, Sreedhar Kumar, Maria Pascual-Garcia and Andreas Hierlemann*



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Elemental answers



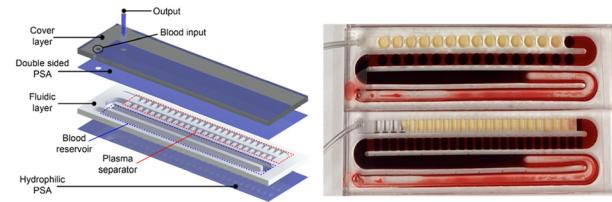
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A microfluidic device for passive separation of platelet-rich plasma from whole blood

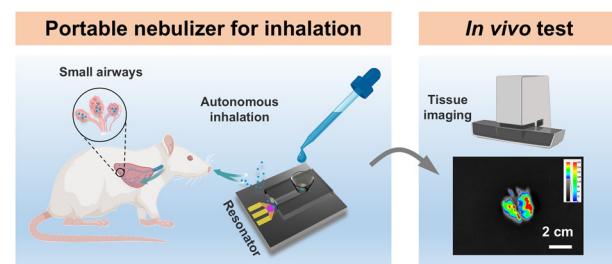
Pablo E. Guevara-Pantoja, Yara Alvarez-Braña, Jon Mercader-Ruiz, Fernando Benito-López and Lourdes Basabe-Desmonts*



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High frequency capillary wave-enabled ultra-small droplets for inhaled drug delivery

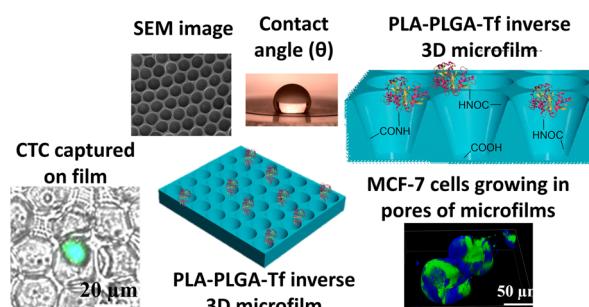
Haitao Zhang, Zirui Zhao, Yangchao Zhou, Zaoxian Mei and Xuexin Duan*



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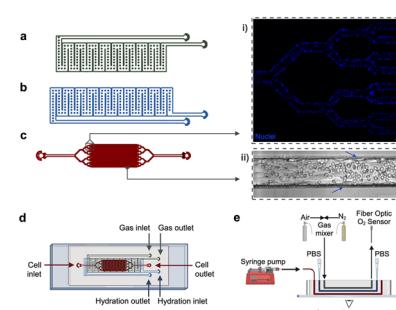
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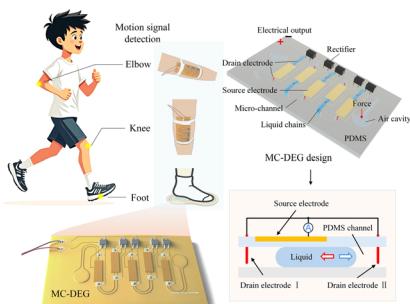
Oxygen-tunable endothelialized microvascular chip to assess hypoxia-reperfusion in sickle cell disease

Samantha R. Schad, Joan D. Beckman, Wilbur A. Lam and David K. Wood*



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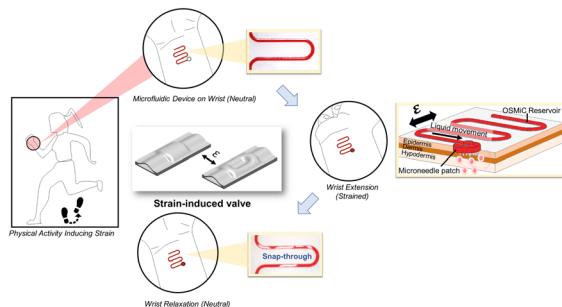
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Microchannel-confined droplet-based electricity generator for biomechanical energy conversion and sensing

Jianwu Wang, Yonghui Zhang, Xiaokai Li, Zhengyu Li, Yuheng Li, Jiahao Zhang, Xin Liu, Jing Sun* and Huanxi Zheng*

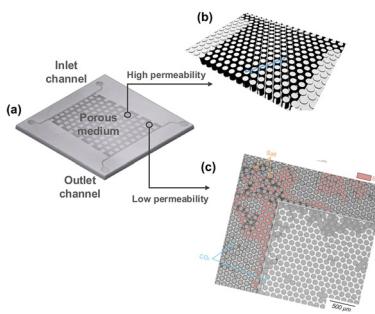
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Rana Altay, Hudson Gasvoda, Max Mailloux-Beauchemin, Johanna Brown, Kari Olson and I. Emre Araci*

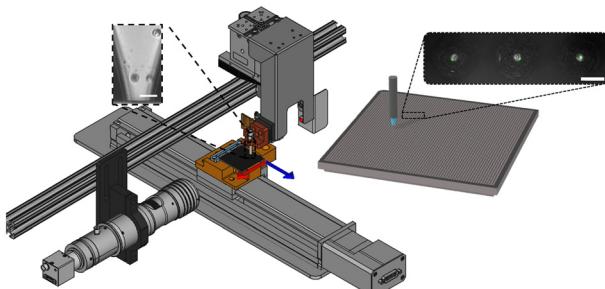
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Ge Zhang, Jon Burger, Josephina Schembre-McCabe and Anthony R. Kovscek*

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High-speed cell partitioning through reactive machine learning-guided inkjet printing

Eric Cheng, Glenn Chang, Haley MacDonald, Miguel Ramirez, Pamela A. Hoodless, Robin Coope, Adi Steif* and Karen C. Cheung*

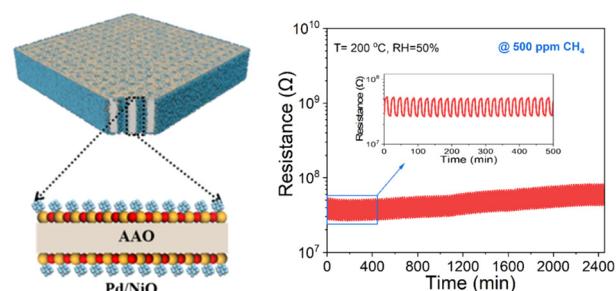


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Fingertip-chip sensor based on Pd nanocluster sensitized 3D NiO nanotube arrays for real-time, selective methane detection

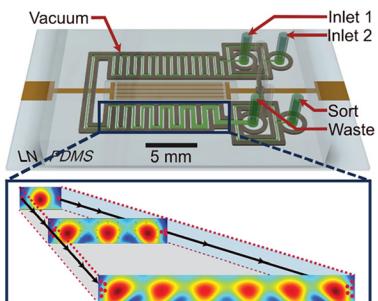
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Expanding channels enhanced diffractive SAW actuated particle enrichment in vacuum-sealed microfluidic channels

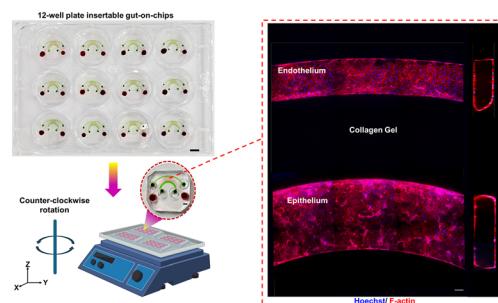
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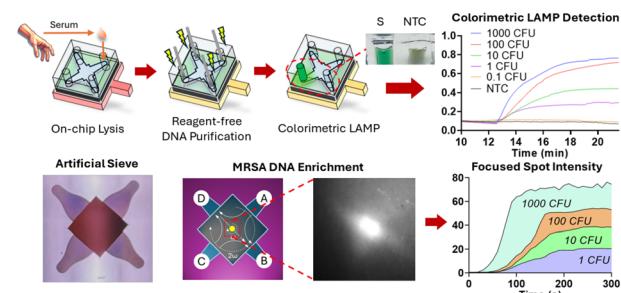
Nishanth Venugopal Menon, Jeeyeon Lee, Hung Dong Truong, Sriram Bharathkumar and Chwee Teck Lim*

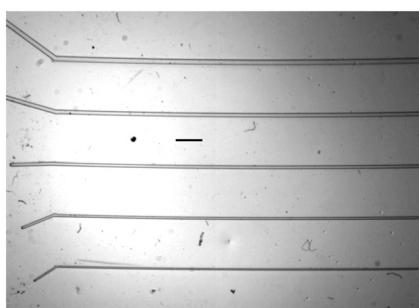


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A compact sample-to-answer system for rapid MRSA detection in serum based on reagent-free electrophoretic purification of nucleic acids and colorimetric LAMP

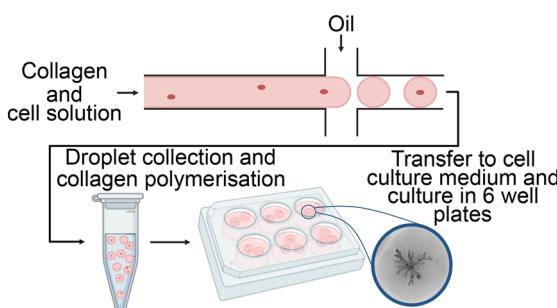
Yung Ching Lee, Yang Bu, Sheng Ni, Yuze Liu, Anni Hu and Levent Yobas*





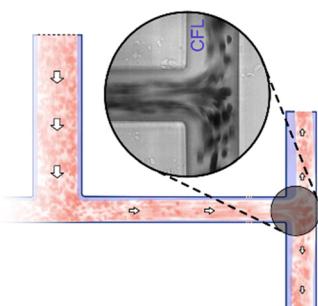
Bubble removal in microfluidic channels surrounded by gas-permeable media: experiments and a predictive model

Ludovic Keiser, Loukas Stamoulis, Baptiste Georjon, Philippe Marmottant and Benjamin Dollet*



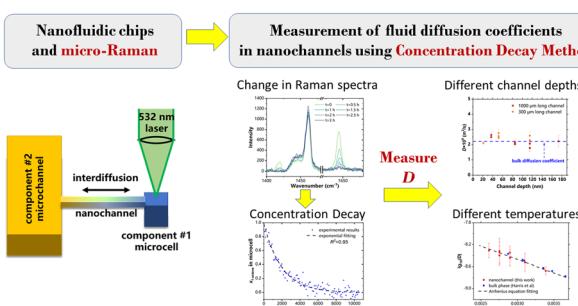
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Iris Ruider, Anna Pastucha, Marion K. Raich, Wentao Xu, Yan Liu, Maximilian Reichert, David Weitz and Andreas R. Bausch*



Impact of sequential bifurcations on the cell-free layer of healthy and rigid red blood cells

Yazdan Rashidi,* Christian Wagner and Steffen M. Recktenwald



Investigation of fluid diffusion kinetics in nanochannels using micro-Raman spectrometry

Jingyu Chen, Haowei Lu, Kecheng Zeng, Haidong Ji, Peixue Jiang and Ruina Xu*

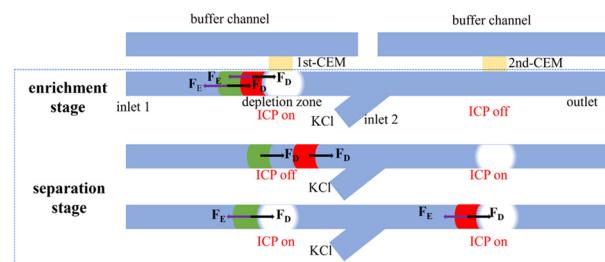


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Yixing Gou,* Guowei Sun, Runze Sun, Jun Huang and Zirui Li*



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Disruption and nebulization of lipid vesicles using surface acoustic waves for direct mass spectrometry

Yuqi Huang, Qian Ma, Ashton Taylor, Lucas Lienard, Theresa Evans-Nguyen and Venkat Bhethanabotla*

