Lab on a Chip

Devices and applications at the micro- and nanoscale

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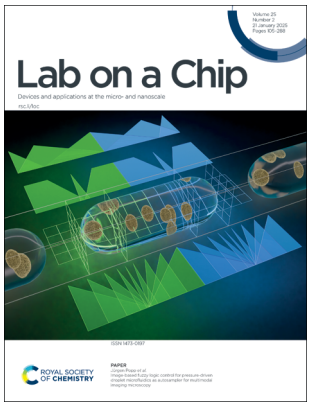
ISSN 1473–0197 CODEN LCAHAM 25(2) 105–288 (2025)



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See Jürgen Popp *et al.*, pp. 119–126.
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Data storage based on the absence of nucleotides using a bacteriophage abortive infection system reverse transcriptase

Gregor Bajc, Anja Pavlin, Małgorzata Figiel, Weronika Zajko, Marcin Nowotny and Matej Butala*

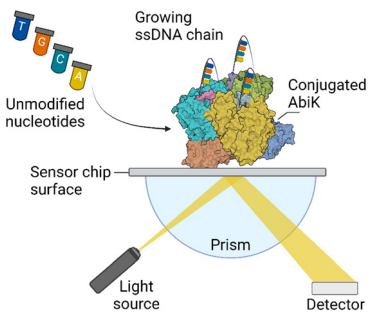

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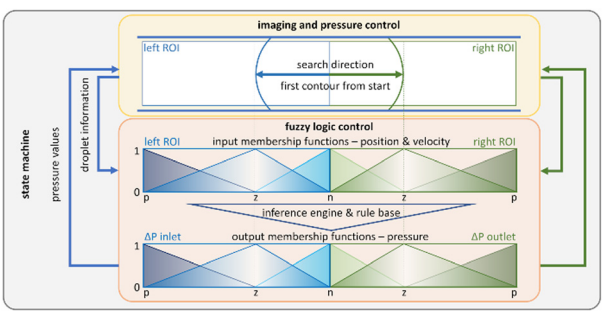
Image-based fuzzy logic control for pressure-driven droplet microfluidics as autosampler for multimodal imaging microscopy

Fabian Ott, Tobias Meyer-Zedler, Michael Schmitt and Jürgen Popp*



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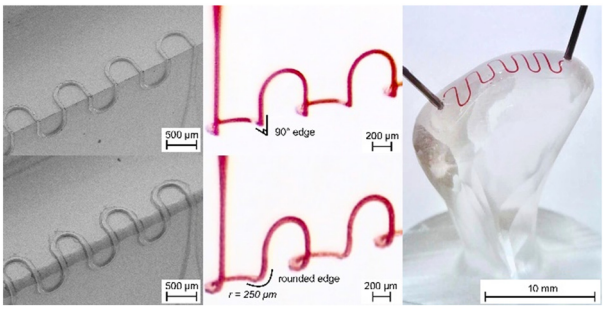
5-Axis CNC micro-milling machine for three-dimensional microfluidics

Mitchell J. C. Modarelli, Devin M. Kot-Thompson and Kazunori Hoshino*



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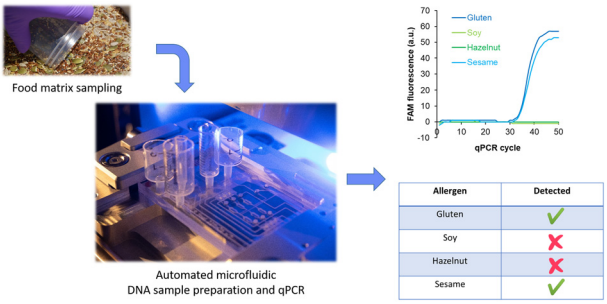
Anne-Gaëlle Bourdat,* Remco den Dulk, Bastien Serrano, François Boizot, Gervais Clarebout, Xavier Mermet, Raymond Charles, Jean Porcherot, Armelle Keiser, Manuel Alessio, Patricia Laurent, Nicolas Sarrut and Myriam Cubizolles



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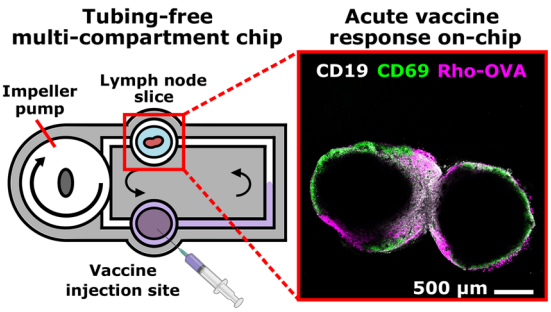
A 3D-printed multi-compartment organ-on-chip platform with a tubing-free pump models communication with the lymph node

Sophie R. Cook, Alexander G. Ball, Anwaruddin Mohammad and Rebecca R. Pompano*



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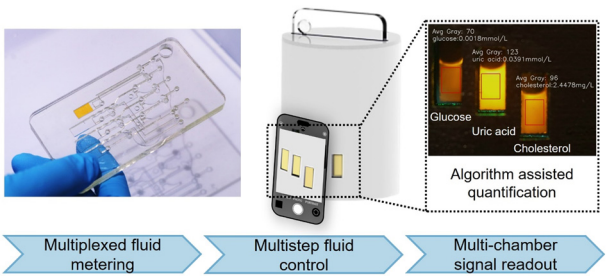
A gravity-driven microfluidic metering system for automation of multiplexed bioassays

Lu Zhang, Johnson Q. Cui* and Shuhuai Yao*



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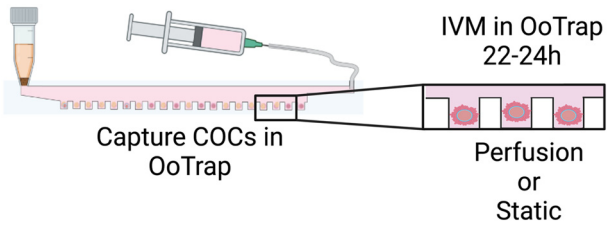

OoTrap: enhancing oocyte collection and maturation with a field-deployable fluidic device

Roksan Franko
and Marcia de Almeida Monteiro Melo Ferraz*

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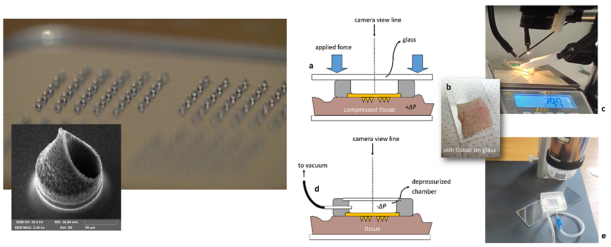

Beveled microneedles with channel for transdermal injection and sampling, fabricated with minimal steps and standard MEMS technology

Alvise Bagolini,* Nicolò G. Di Novo, Severino Pedrotti, Matteo Valt, Cristian Collini, Nicola M. Pugno
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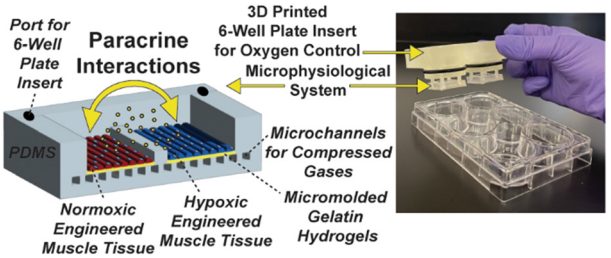

Profiling paracrine interactions between hypoxic and normoxic skeletal muscle tissue in a microphysiological system fabricated from 3D printed components

Megan L. Rexius-Hall, Malinda D. Madrigal, Cem Y. Kilic, Keyue Shen and Megan L. McCain*

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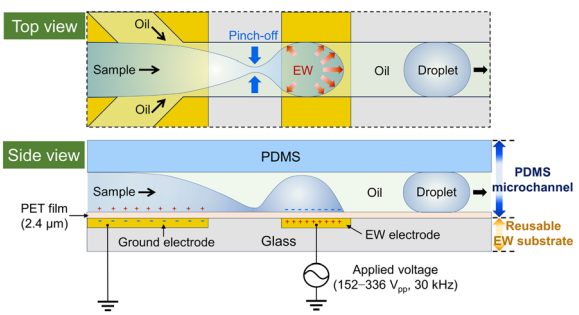

Reusable EWOD-based microfluidic system for active droplet generation

Suhee Park, Jaewook Ryu and Ki-Ho Han*

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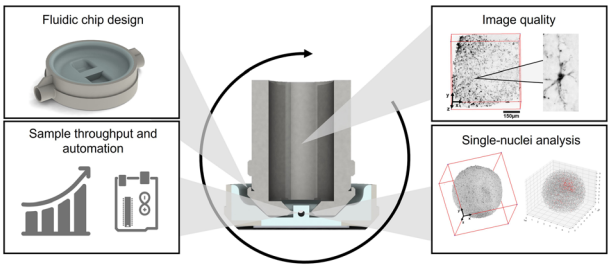
An agarose fluidic chip for high-throughput *in toto* organoid imaging

Sarah De Beuckeleer, Andres Vanhooydonck, Johanna Van Den Daele, Tim Van De Looverbosch, Bob Asselbergh, Hera Kim, Coen Campsteijn, Peter Ponsaerts, Regan Watts* and Winnok H. De Vos*



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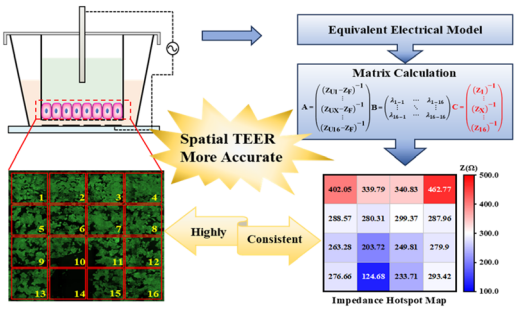
Real-time cell barrier monitoring by spatial transepithelial electrical resistance measurement on a microelectrode array integrated Transwell

Yimin Shi, Sheng Sun, Hui Liu, Mingda Zhao, Meiyan Qin, Jinlong Liu, Jingfang Hu, Yang Zhao, Mingxiao Li, Lingqian Zhang* and Chengjun Huang*



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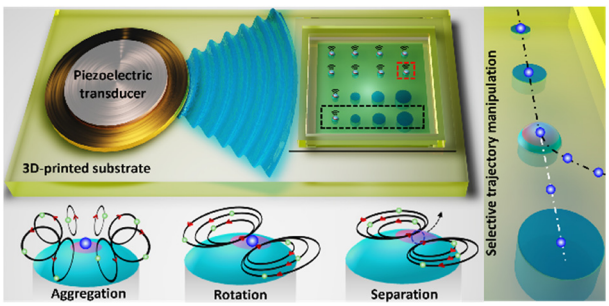
3D-printed acoustic metasurface with encapsulated micro-air-bubbles for frequency-selective manipulation

Miaomiao Ji, Yukai Liu, Zheng Zhang, Rui Xu, Fanyun Pan, Ya Zhang, Rouyu Su, Minghui Lu, Xiujuan Zhang* and Guanghui Wang*



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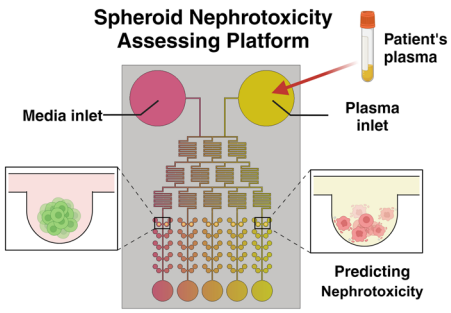
High-throughput microfluidic spheroid technology for early detection of colistin-induced nephrotoxicity with gradient-based analysis

Yugyeong Lee, Yunsang Choi, Ju Lan Chun, Hong Bin Kim, Sejoong Kim,* Eu Suk Kim* and Sungsu Park*



CORRECTION

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Correction: Distal renal tubular system-on-a-chip for studying the pathogenesis of influenza A virus-induced kidney injury

Yueyue Huangfu, Ji Wang, Jiao Feng and Zhi-Ling Zhang*