



EES Catalysis

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Fundamental questions
Elemental answers

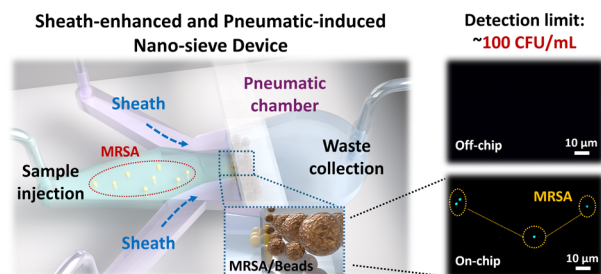
Registered charity number: 207890



2157

Sheath-enhanced concentration and on-chip detection of bacteria from an extremely low-concentration level

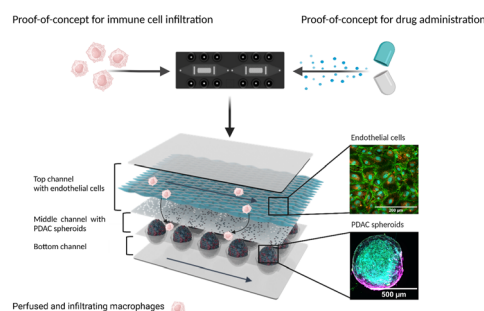
Xinye Chen, Ruonan Peng, Ruo-Qian Wang and Ke Du*



2168

Modelling of the multicellular tumor microenvironment of pancreatic ductal adenocarcinoma (PDAC) on a fit-for-purpose biochip for preclinical drug discovery

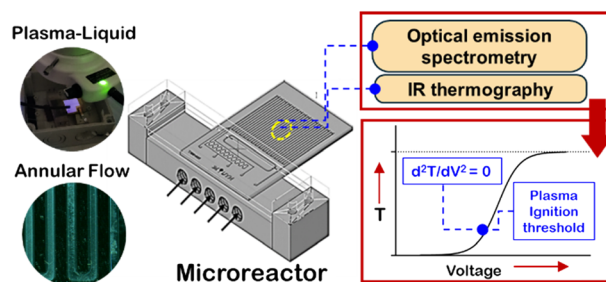
Alina Deipenbrock, Ben Eric Wilmes, Thomas Sommermann, Nader Abdo, Kyra Moustakas, Martin Raasch, Knut Rennert and Nicole E. Teusch*



2182

Ignition of non-equilibrium methane dielectric barrier discharges in a multiphase plasma-liquid microfluidic device

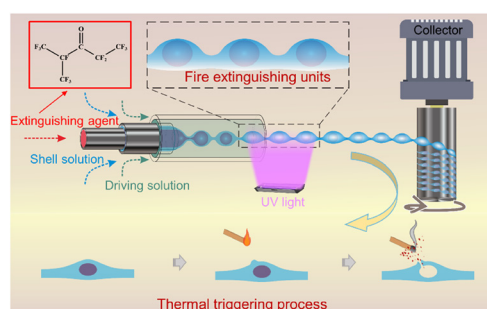
Sudip Das, Mackenzie Meyer, Mark J. Kushner and Ryan L. Hartman*



2193

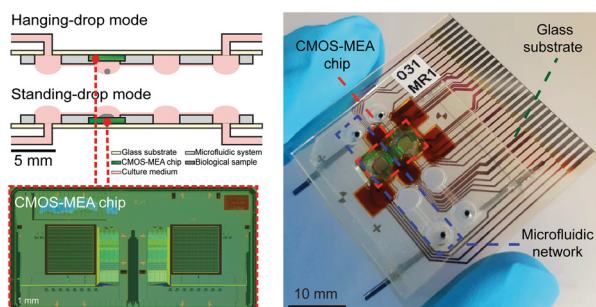
Array-structured microcapsule fibers for efficient fire extinguishing in confined spaces

Qiaosheng Pan, Ning Sang, Tianpei Zhou, Changzheng Wu, Ting Si, Fangsheng Huang* and Zhiqiang Zhu*



PAPERS

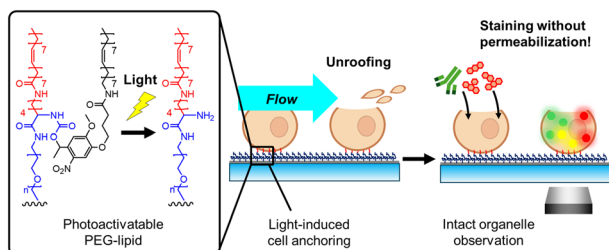
2205



Seamless integration of CMOS microsenors into open microfluidic systems

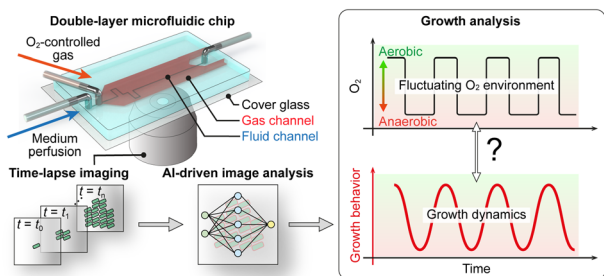
Raziyeh Bounik, Alex E. Landolt, Jihyun Lee, Vijay Viswam, Fernando Cardes, Mario M. Modena* and Andreas Hierlemann

2222

Microfluidic cell unroofing for the *in situ* molecular analysis of organelles without membrane permeabilization

Yuki Umeda, Shinya Yamahira, Koki Nakamura, Tomoko Takagi, Tomoko Suzuki, Kae Sato, Yusuke Hirabayashi, Akimitsu Okamoto and Satoshi Yamaguchi*

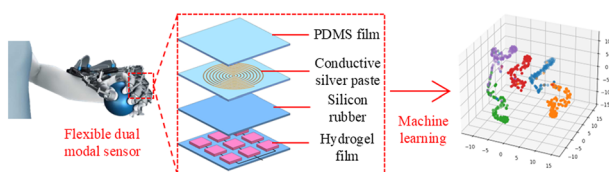
2234



Unveiling microbial single-cell growth dynamics under rapid periodic oxygen oscillations

Keitaro Kasahara, Johannes Seiffarth, Birgit Stute, Eric von Lieres, Thomas Drepper, Katharina Nöh and Dietrich Kohlheyer*

2247



Machine learning-assisted flexible dual modal sensor for multi-sensing detection and target object recognition in the grasping process

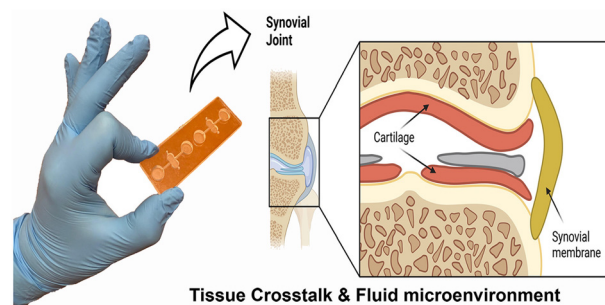
Wentao Dong,* Kaiqi Sheng, Chang Chen and Xiaopeng Qiu



2256

The effect of cyclic fluid perfusion on the proinflammatory tissue environment in osteoarthritis using equine joint-on-a-chip models

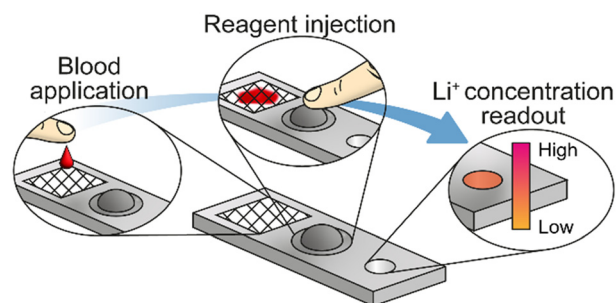
Johannes Heidenberger, Eva I. Reihls, Jonathan Strauss, Martin Frauenlob, Sinan Gültekin, Iris Gerner, Stefan Toegel, Peter Ertl, Reinhard Windhager, Florian Jenner and Mario Rothbauer*



2270

On-chip colorimetric assay for determining serum lithium concentration from whole blood

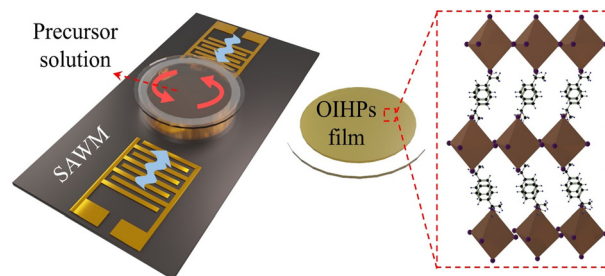
Carl Olsson, Janosch Hauser, Federico Ribet, Fredrik Wikström, André Görgens, Olof Beck, Martin Schalling, Lena Backlund and Niclas Roxhed*



2278

Chiral organic-inorganic hybrid perovskites synthesized using an acoustofluidic closed system

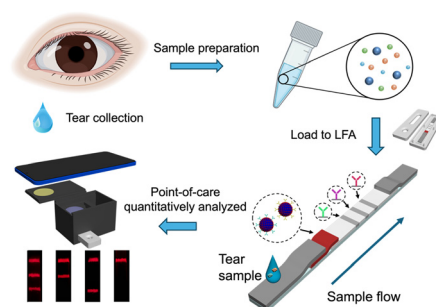
Tao Zhou, Yan Yu, Haonan Zhang, Chong Li, Ran Tao,* Fujian Ren, Chen Fu, Jingting Luo and Yongqing Fu



2291

Dual lateral flow assay using quantum nanobeads for quantitative detection of BDNF and TNF- α in tears

Yue Wu, Yubing Hu, Nan Jiang, Maria W. Georgi, Ali K. Yetisen* and M. Francesca Cordeiro*



CORRECTION

2304

Correction: Functionality integration in stereolithography 3D printed microfluidics using a “print-pause-print” strategy

Matthieu Sagot, Timothée Derkenne, Perrine Giunchi, Yohan Davit, Jean-Philippe Nougayrède, Corentin Tregouet, Vincent Rimbault, Laurent Malaquin and Bastien Venzac*

