Lab on a Chip

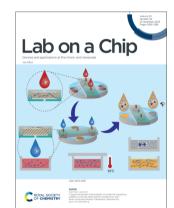
Devices and applications at the micro- and nanoscale

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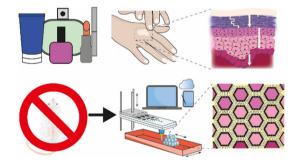
Cover See Nae Yoon Lee et al., pp. 5081–5091. Image reproduced by permission of Nae Yoon Lee from Lab Chip, 2023, 23, 5081. Image credit: Heewon Choi.

PERSPECTIVE

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Towards skin-on-a-chip for screening the dermal absorption of cosmetics

Jessica Govey-Scotland, Liam Johnstone, Connor Myant and Mark S. Friddin*

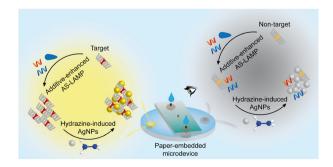


PAPERS

5081

A paper-embedded thermoplastic microdevice integrating additive-enhanced allele-specific amplification and silver nanoparticle-based colorimetric detection for point-of-care testing

Duc Anh Thai, Seung Kyun Park and Nae Yoon Lee*



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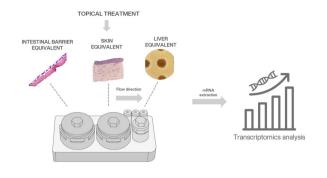
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PAPERS

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Combining a microphysiological system of three organ equivalents and transcriptomics to assess toxicological endpoints for cosmetic ingredients

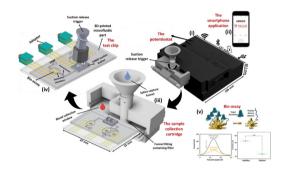
Nathalia de Carvalho Indolfo, Melissa Dibbernn Ganzerla, Tábata Renée Doratioto, Thayná Mendonça Avelino, Larissa Bueno Tofani, Luis Antonio Peroni, Renata Santos Rabelo, Kelen Fabiola Arroteia and Ana Carolina Migliorini Figueira*



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Additively manufactured multiplexed electrochemical device (AMMED) for portable sample-to-answer detection

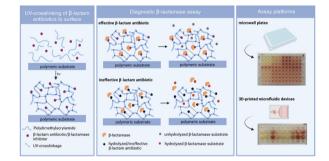
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Highly efficient β-lactamase assay applying polydimethylacrylamide-based surface functionalization with β -lactam antibiotics and β -lactamase inhibitors

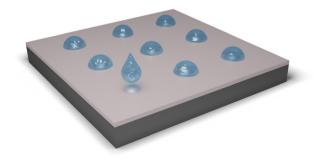
Simone Rentschler, Max Borgolte, Alexander Filbert, Stefan Laufer and Hans-Peter Deigner*



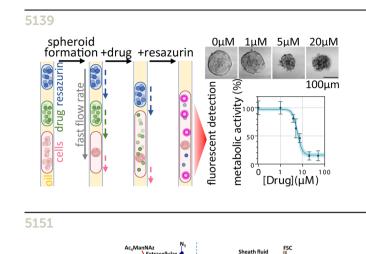
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Ultrasonic spectroscopy of sessile droplets coupled to optomechanical sensors

K. G. Scheuer, F. B. Romero, G. J. Hornig and R. G. DeCorby*



PAPERS



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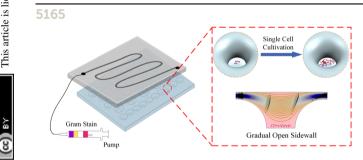
Droplet encap CTC

Simple droplet microfluidics platform for drug screening on cancer spheroids

Caroline Parent,* Kiran Raj Melayil, Ya Zhou, Vivian Aubert, Didier Surdez, Olivier Delattre, Claire Wilhelm* and Jean-Louis Viovy*

Optomicrofluidic detection of cancer cells in peripheral blood via metabolic glycoengineering

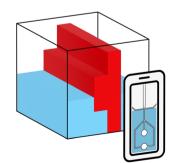
K. Mirkale,* S. K. Jain, T. S. Oviya and S. Mahalingam



Advancing *in situ* single-cell microbiological analysis through a microwell droplet array with a gradual open sidewall

Jie Wang, Lin Du, Yuwei Han, Dawei Zhang* and Dalei Jing*

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Alignment-free construction of double emulsion droplet generation devices incorporating surface wettability contrast

Yunus Aslan, Olivia McGleish, Julien Reboud and Jonathan M. Cooper*

PAPERS

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A human initial lymphatic chip reveals distinct mechanisms of primary lymphatic valve dysfunction in acute and chronic inflammation

Samantha Kraus and Esak Lee*

Expansion phase (high interstitial pressure, open primary valves for drainage)

