

Lab on a Chip

Devices and applications at the micro- and nanoscale
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Cover

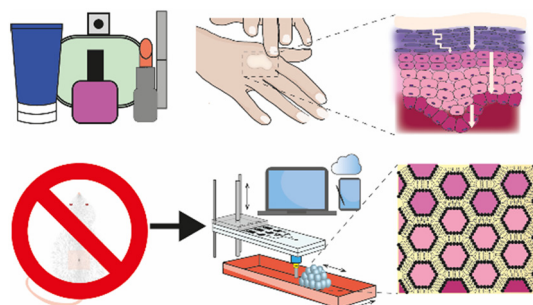
See Nae Yoon Lee *et al.*,
pp. 5081–5091.
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PERSPECTIVE

5068

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

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

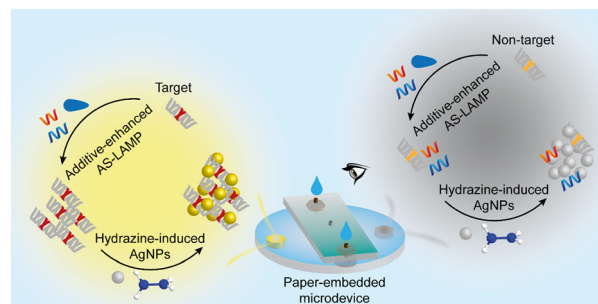


PAPERS

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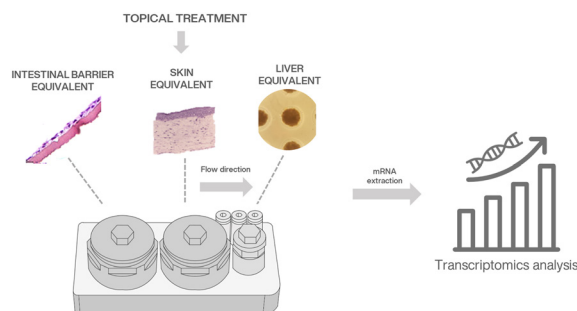
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Combining a microphysiological system of three organ equivalents and transcriptomics to assess toxicological endpoints for cosmetic ingredients

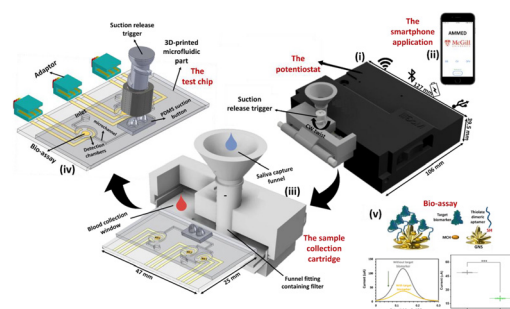
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Additively manufactured multiplexed electrochemical device (AMMED) for portable sample-to-answer detection

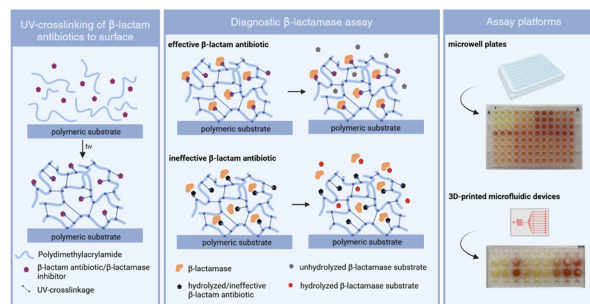
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Highly efficient β -lactamase assay applying polydimethylacrylamide-based surface functionalization with β -lactam antibiotics and β -lactamase inhibitors

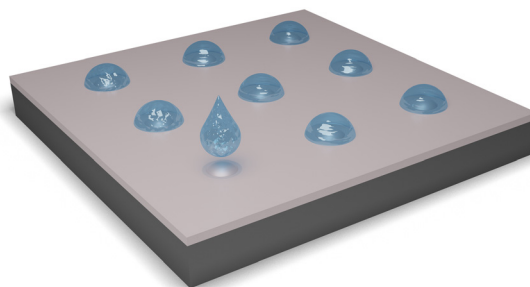
Simone Rentschler, Max Borgolte, Alexander Filbert, Stefan Laufer and Hans-Peter Deigner*



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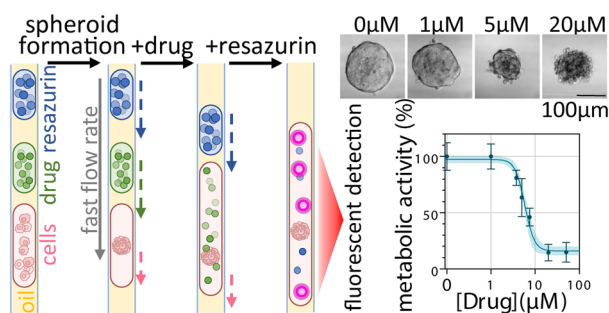
Ultrasonic spectroscopy of sessile droplets coupled to optomechanical sensors

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



PAPERS

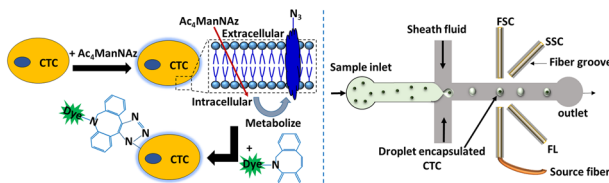
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Simple droplet microfluidics platform for drug screening on cancer spheroids

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

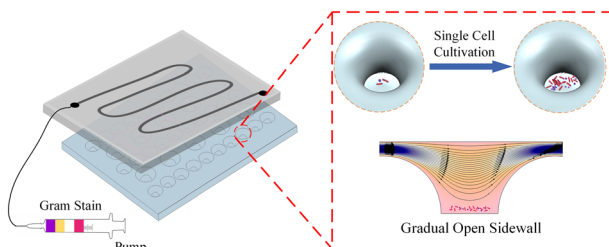
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Optomicrofluidic detection of cancer cells in peripheral blood via metabolic glycoengineering

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

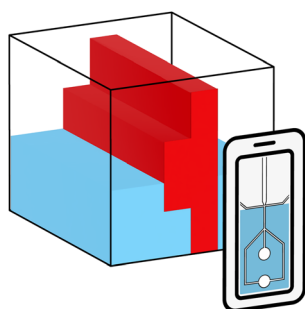
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Advancing *in situ* single-cell microbiological analysis through a microwell droplet array with a gradual open sidewall

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

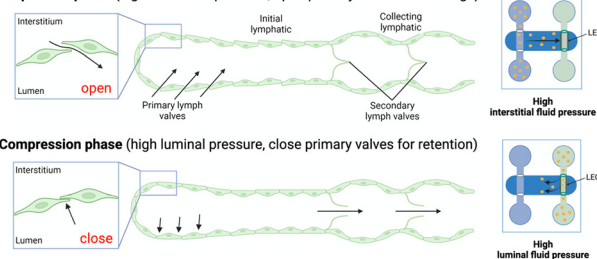
Yunus Aslan, Olivia McGleish, Julien Reboud and Jonathan M. Cooper*



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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)**Compression phase** (high luminal pressure, close primary valves for retention)