## Lab on a Chip

### Devices and applications at the micro- and nanoscale rsc.li/loc

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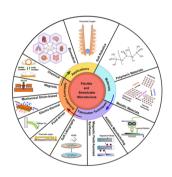
Inside cover See Todd Fernandez, David R. Myers et al., pp. 2176-2192. Image reproduced by permission of Priscilla Delgado from Lab Chip, 2024, 24, 2176. Artwork designed by Ella Maru Studio.

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Uditha Roshan, Amith Mudugamuwa, Haotian Cha, Samith Hettiarachchi, Jun Zhang\* and Nam-Trung Nguyen\*



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An economical in-class sticker microfluidic activity develops student expertise in microscale physics and device manufacturing

Priscilla Delgado, C. Alessandra Luna, Anjana Dissanayaka, Oluwamayokun Oshinowo, Jesse J. Waggoner, Sara Schley, Todd Fernandez\* and David R. Myers\*





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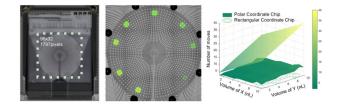


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#### Polar coordinate active-matrix digital microfluidics for high-resolution concentration gradient generation

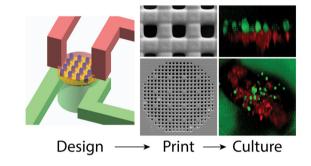
Bingbing Zhang, Jinxin Fu, Maohua Du, Kai Jin, Qi Huang, Jiahao Li, Dongping Wang, Siyi Hu, Jinhua Li\* and Hanbin Ma\*



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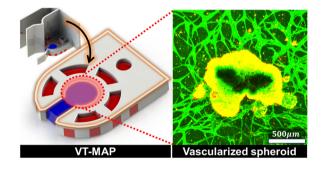
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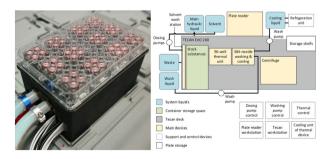
Jungseub Lee, Sangmin Jung, Hye Kyoung Hong, Hyeonsu Jo, Stephen Rhee, Ye-Lin Jeong, Jihoon Ko, Yong Beom Cho\* and Noo Li Jeon\*



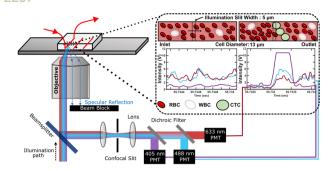
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Simon Seidel,\* Katja F. Winkler, Anke Kurreck, Mariano Nicolas Cruz-Bournazou, Katharina Paulick, Sebastian Groß and Peter Neubauer



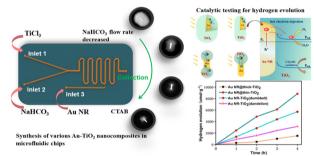
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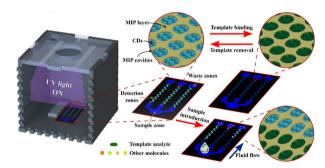
Nilay Vora, Prashant Shekar, Taras Hanulia, Michael Esmail, Abani Patra and Irene Georgakoudi\*

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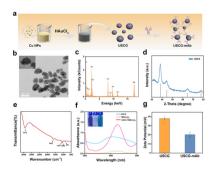
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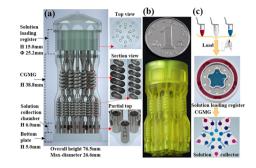
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Arata Tsuchida, Taikopaul Kaneko, Kaori Nishikawa, Mayu Kawasaki, Ryuji Yokokawa and Hirofumi Shintaku\*

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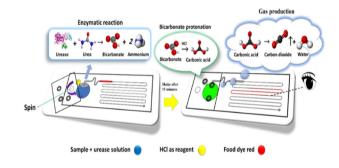
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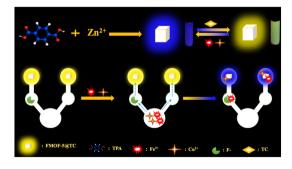
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Mahdi Samadi Khezri, Mohammad Reza Housaindokht\* and Mojtaba Firouzi



A novel ratiometric design of microfluidic paperbased analytical device for the simultaneous detection of Cu<sup>2+</sup> and Fe<sup>3+</sup> in drinking water using a fluorescent MOF@tetracycline nanocomposite

Sabah H. Al-Jaf, Sameera Sh. Mohammed Ameen and Khalid M. Omer\*

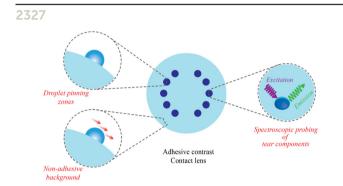


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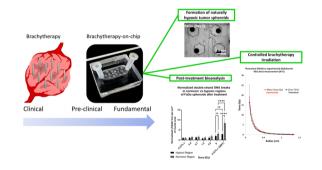
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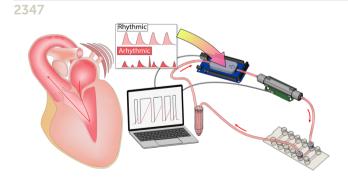
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Rodin Chermat,\* Elena Refet-Mollof, Yuji Kamio, Jean-François Carrier, Philip Wong and Thomas Gervais



#### A microfluidic model to study the effects of arrhythmic flows on endothelial cells

Austin Lai, Adam Hawke, Mokhaled Mohammed, Peter Thurgood, Gianmarco Concilia, Karlheinz Peter, Khashayar Khoshmanesh\* and Sara Baratchi\*

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