

# Lab on a Chip

Devices and applications at the micro- and nanoscale  
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ISSN 1473-0197 CODEN LCAHAM 25(5) 731-1374 (2025)



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**Inside cover**  
See W. Russ Algar *et al.*,  
pp. 884–955.  
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## PERSPECTIVES

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### Point-of-need diagnostics in a post-Covid world: an opportunity for paper-based microfluidics to serve during syndemics

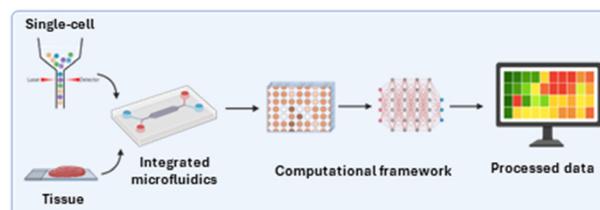
Maria-Nefeli Tsaloglou,\* Dionysios C. Christodouleas, Jonathan Milette, Kendall Milkey, Isabelle C. Romine, Judy Im, Shefali Lathwal, Duraipandian Thava Selvam, Hadley D. Sikes and George M. Whitesides\*



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### Microfluidics for morphomics and spatial omics applications

Nishanth Venugopal Menon, Jeeyeon Lee, Tao Tang and Chwee Teck Lim\*



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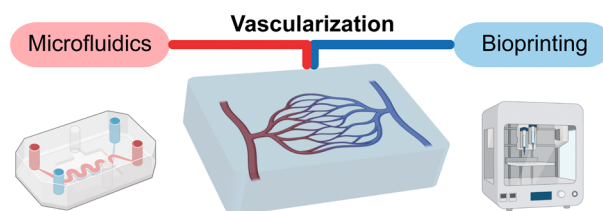
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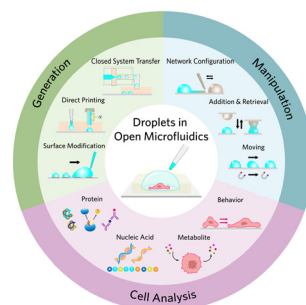
Xuan Mei, Ziyi Yang, Xiran Wang, Alan Shi, Joel Blanchard, Fanny Elahi, Heemin Kang,\* Gorka Orive\* and Yu Shrike Zhang\*



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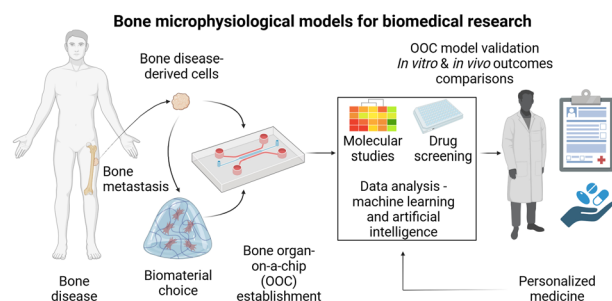
Jiaxu Lin, Ying Hou, Qiang Zhang and Jin-Ming Lin\*



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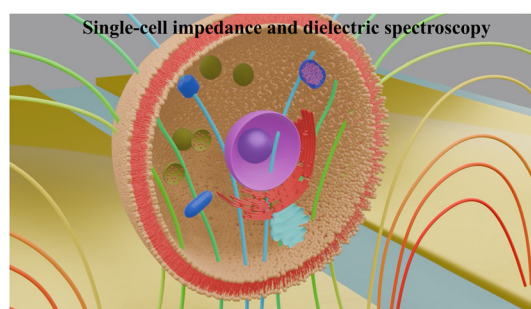
Francisco Verdugo-Avello,\* Jacek K. Wychowaniec, Carlos A. Villacis-Aguirre, Matteo D'Este and Jorge R. Toledo



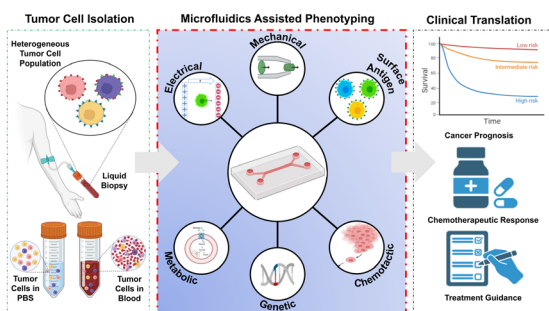
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## Tutorial on impedance and dielectric spectroscopy for single-cell characterisation on microfluidic platforms: theory, practice, and recent advances

Fatemeh Dadkhah Tehrani, Michael D. O'Toole\* and David J. Collins



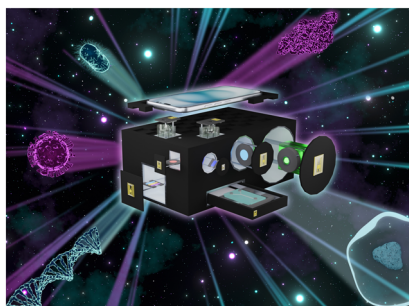
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### Advances in microfluidic platforms for tumor cell phenotyping: from bench to bedside

Rutwik Joshi, Hesaneh Ahmadi, Karl Gardner, Robert K. Bright, Wenwen Wang and Wei Li\*

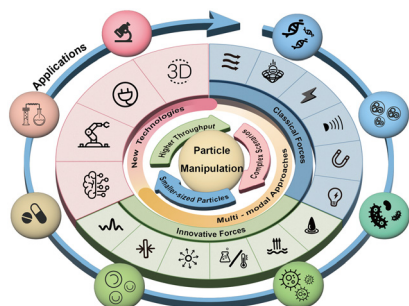
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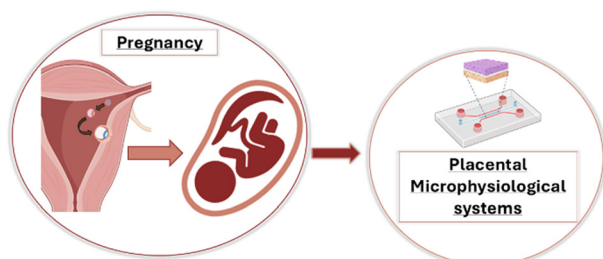
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Chundong Xue, Yifan Yin, Xiaoyu Xu, Kai Tian, Jinghong Su and Guoqing Hu\*

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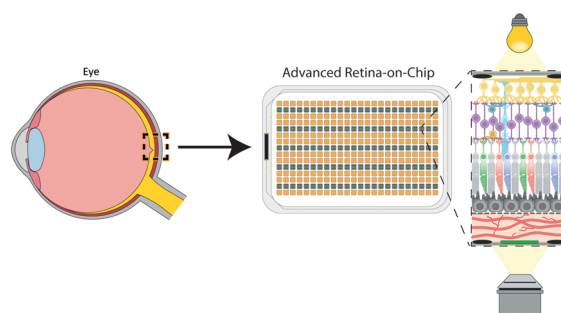
Inês M. Gonçalves, Muhammad Afzal, Nithil Kennedy, Ana Moita, Rui Lima, Serge Ostrovidov, Takeshi Hori, Yuji Nashimoto and Hirokazu Kaji\*



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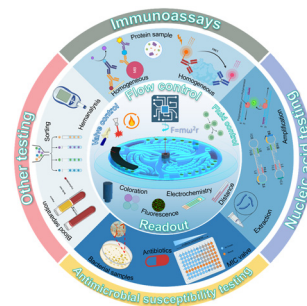
Tarek Gensheimer, Devin Veerman, Edwin M. van Oosten, Loes Segerink, Alejandro Garanto and Andries D. van der Meer\*



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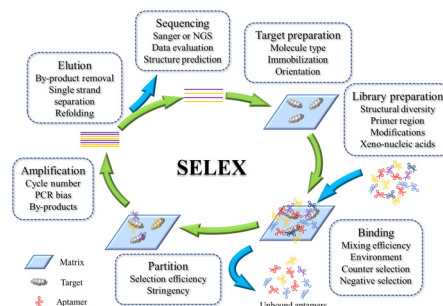
Huijuan Yuan, Zeyu Miao, Chao Wan, Jingjing Wang, Jinzhi Liu, Yiwei Li, Yujin Xiao,\* Peng Chen\* and Bi-Feng Liu\*



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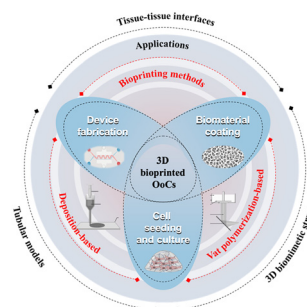
Yi-Da Chung, Yi-Cheng Tsai, Chi-Hung Wang and Gwo-Bin Lee\*



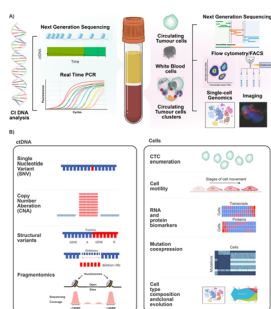
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## Developing 3D bioprinting for organs-on-chips

Zuhao Wu, Rui Liu, Ning Shao and Yuanjin Zhao\*



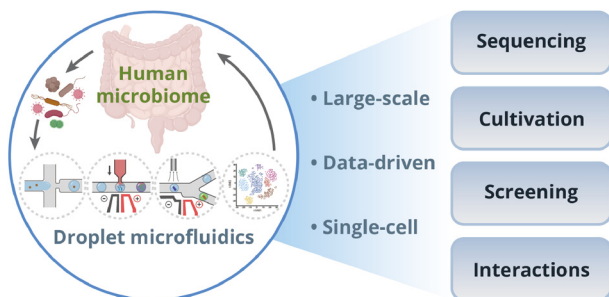
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Yibin Xu, Zhiyi Wang, Caiming Li, Shuiquan Tian and Wenbin Du\*

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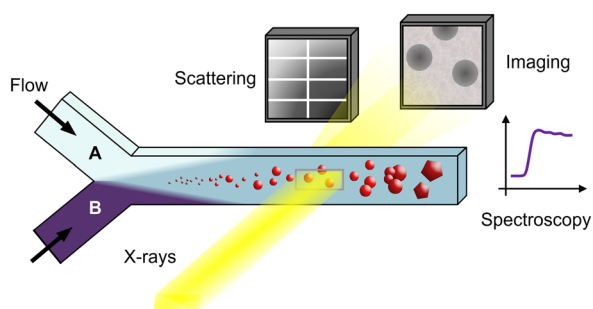


and Organs-on-Chip

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Johannes Dornhof, Jochen Kieninger, Stefan J. Rupitsch and Andreas Weltin\*

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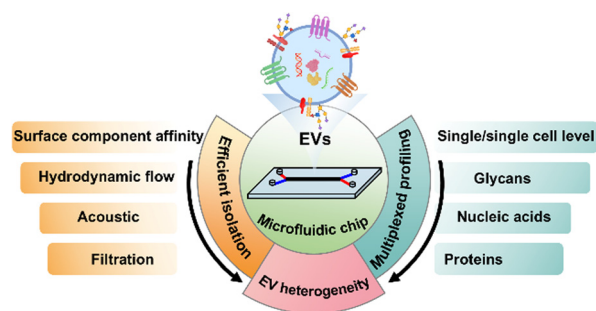
Mark A. Levenstein,\* Corinne Chevallard, Florent Malloggi, Fabienne Testard and Olivier Taché



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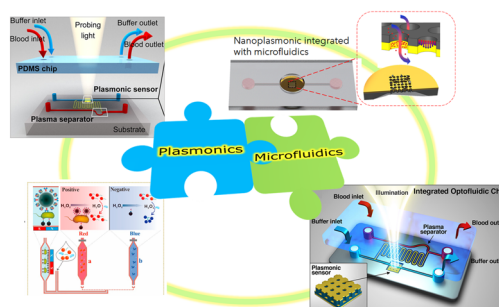
Guihua Zhang, Xiaodan Huang, Sinong Liu, Yiling Xu, Nan Wang, Chaoyong Yang and Zhi Zhu\*



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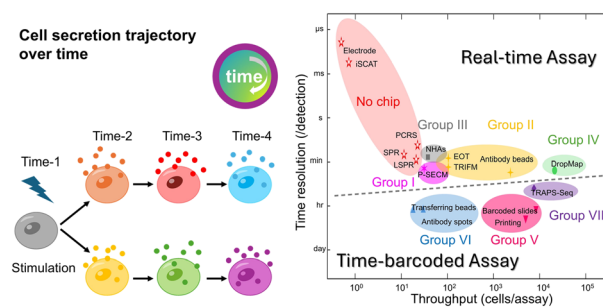
C. Escobedo\* and A. G. Brolo\*



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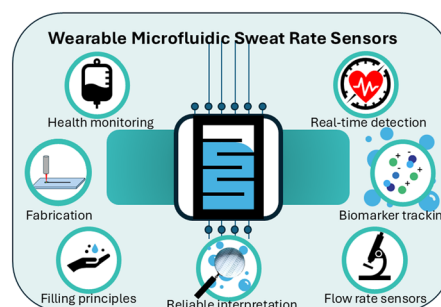
Ying Xu, Mei Tsz Jewel Chan, Ming Yang, Heixu Meng and Chia-Hung Chen\*



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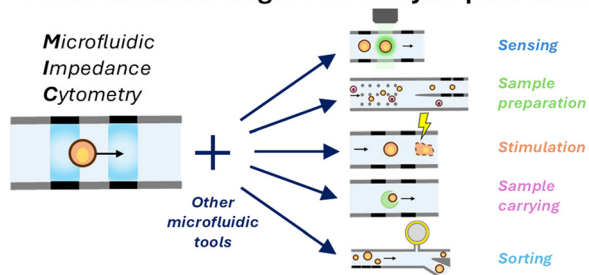
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R. F. R. Ursem, A. Steijlen,\* M. Parrilla,\* J. Bastemeijer, A. Bossche and K. De Wael\*



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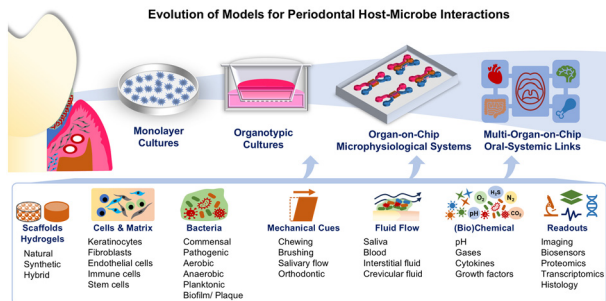


### Integrating impedance cytometry with other microfluidic tools towards multifunctional single-cell analysis platforms

Marta Righetto, Cristian Brandi, Riccardo Reale and Federica Caselli\*

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Hardik Makkar and Gopu Sriram\*

