

Lab on a Chip

Devices and applications at the micro- and nanoscale
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EDITORIAL

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The evolution of miniaturization, automation, and integration – a new scope for *Lab on a Chip*

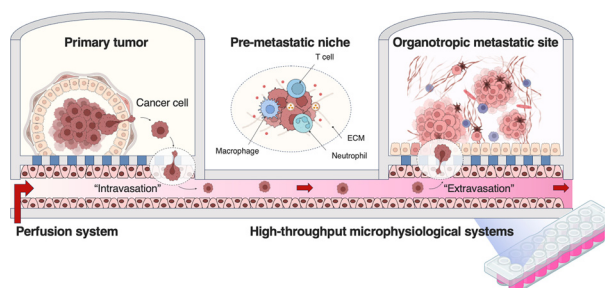


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Understanding organotropism in cancer metastasis using microphysiological systems

Jihoon Ko,* Jiyoung Song, Yedam Lee, Nakwon Choi and Hong Nam Kim*



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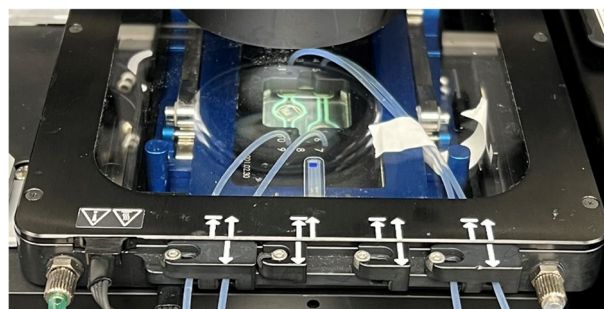


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SliceChip: a benchtop fluidic platform for organotypic culture and serial assessment of human and rodent pancreatic slices

Charles G. Alver, Silvia Álvarez-Cubela, Isabella Altilio, Emily Hutchison, Emma Warrner, Mariana E. Viso, Giana Vitale, David Oliver, Ricardo L. Pastori,* Juan Dominguez-Bendala* and Ashutosh Agarwal*

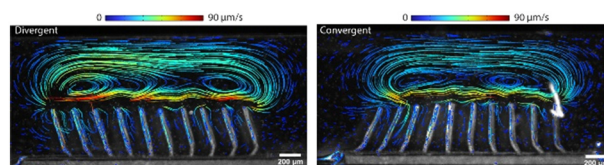


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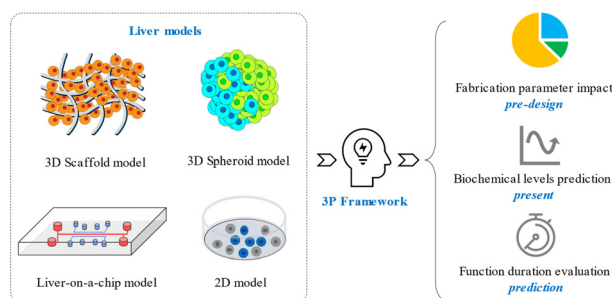
Tongsheng Wang, Tanveer ul Islam, Erik Steur, Tess Homan, Ishu Aggarwal, Patrick R. Onck, Jaap M. J. den Toonder and Ye Wang*



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Assessing bioartificial organ function: the 3P model framework and its validation

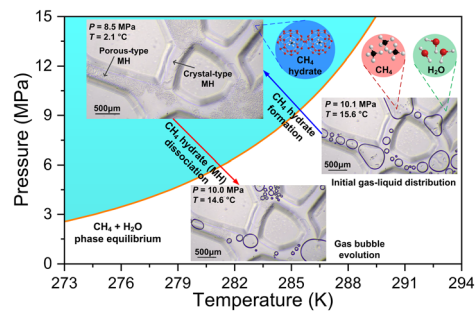
Jingmin An, Shuyu Zhang, Juan Wu, Haolin Chen, Guoshi Xu, Yifan Hou, Ruoyu Liu, Na Li, Wenjuan Cui, Xin Li,* Yi Du* and Qi Gu*



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Jidong Zhang, Zhenyuan Yin,* Saif A. Khan, Shuxia Li, Qingping Li, Xiaohui Liu and Praveen Linga



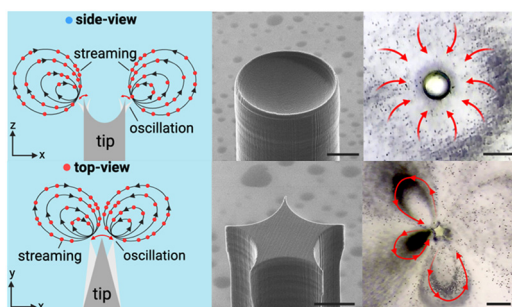
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Quantitative mechanical stimulation of GPR68 using a novel 96 well flow plugin

Philipp Segeritz, Kirill Kolesnik, Daniel J. Scott* and David J. Collins*

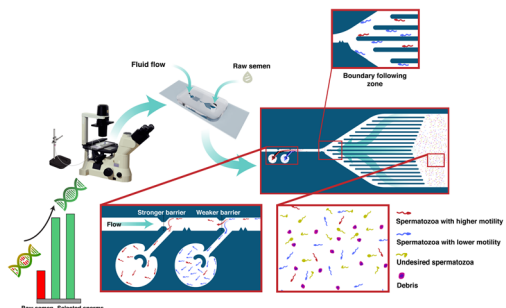
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William S. Harley, Kirill Kolesnik, Daniel E. Heath and David J. Collins*

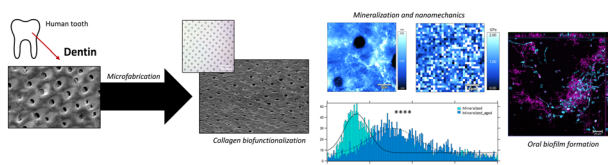
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Mohammadjavad Bouloorchi Tabalvandani, Saeed Javadizadeh and Majid Badiroostami*

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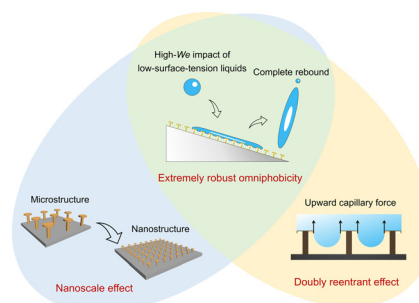
Simon Álvarez, Jose Morales, Paola Tiozzo-Lyon, Pablo Berrios, Valentina Barraza, Kevin Simpson, Andrea Ravasio, Xavier Monforte Vila, Andreas Teuschl-Woller, Christina M. A. P. Schuh and Sebastian Aguayo*



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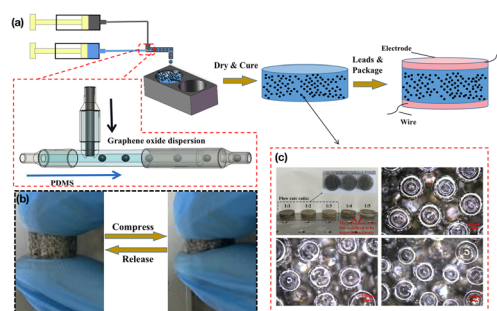
Yingke Wang, Yue Fan, Hongtao Liu, Shuai Wang, Lin Liu, Yingying Dou,* Shilin Huang, Juan Li* and Xuelin Tian*



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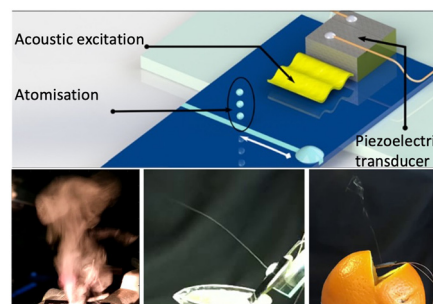
ShengYuan Pan, Tao Zhang, Cheng Zhang,* Ningbo Liao, Miao Zhang and Tianchen Zhao



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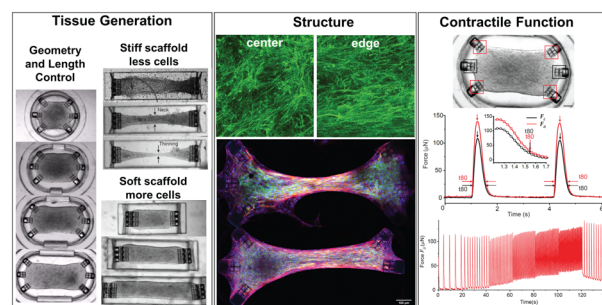
Nguyen Hoai An Le, Jason Brenker, Abanoub Shenoda, Zara Sheikh, Jackson Gum, Hui Xin Ong, Daniela Traini and Tuncay Alan*



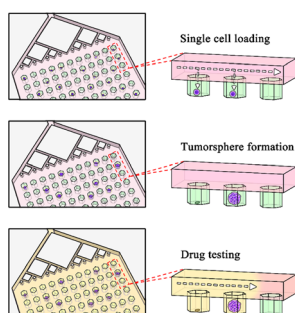
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Geometry and length control of 3D engineered heart tissues using direct laser writing

M. Çağatay Karakan, Jourdan K. Ewoldt, Addianette J. Segarra, Subramanian Sundaram, Miranda C. Wang, Alice E. White, Christopher S. Chen and Kamil L. Ekinci



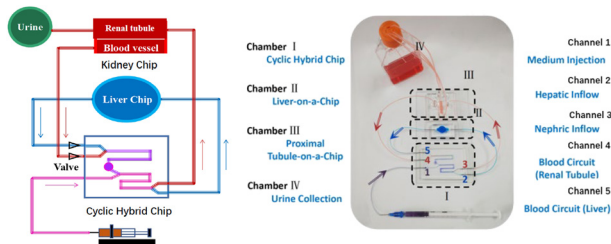
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Selective expansion of renal cancer stem cells using microfluidic single-cell culture arrays for anticancer drug testing

Xiaogang Wang, Tao He, Zihe Chen, Jueming Chen, Yanzhang Luo, Dongguo Lin, Xiancheng Li* and Dayu Liu

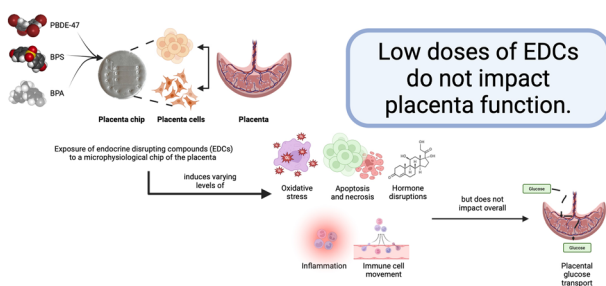
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A three-dimensional (3D) liver-kidney on a chip with a biomimicking circulating system for drug safety evaluation

Qihong Huang, Tianhao Yang, Yunpeng Song, Wenxuan Sun, Jian Xu,* Ya Cheng,* Ruixue Yin, Lili Zhu, Mengting Zhang, Lei Ma, Honglin Li and Hongbo Zhang*

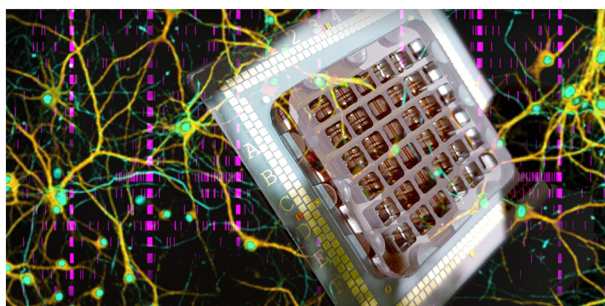
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Endocrine-disrupting compounds and their impact on human placental function: evidence from placenta organ-on-chip studies

Manuel S. Vidal Jr., Lauren S. Richardson, Ananth Kumar Kammala, Sungjin Kim, Po Yi Lam, Rahul Cherukuri, Tilu Jain Thomas, Mohammed Bettayeb, Arum Han, Ivan Rusyn and Ramkumar Menon*

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A microphysiological system for parallelized morphological and electrophysiological read-out of 3D neuronal cell culture

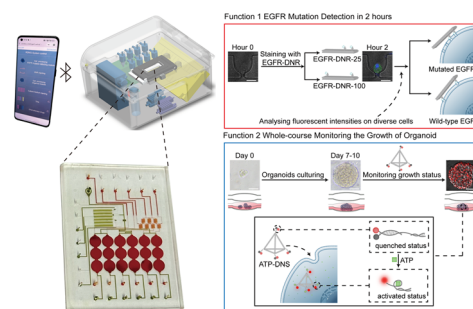
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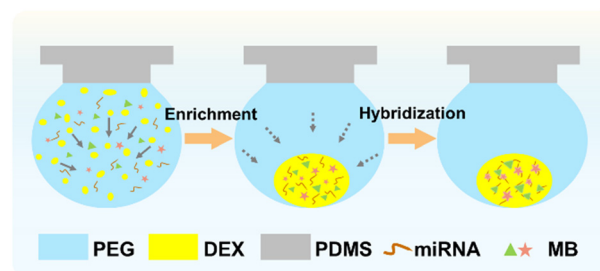
Kexin Zhang, Jiyu Xi, Huiting Zhao, Yadong Wang, Jianchao Xue, Naixin Liang* and Zewen Wei*



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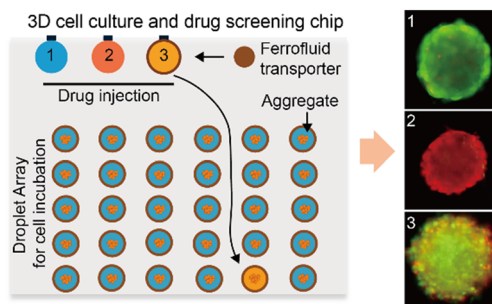
Qihao Zha, Yong Luo, Conghui Liu* and Tailin Xu



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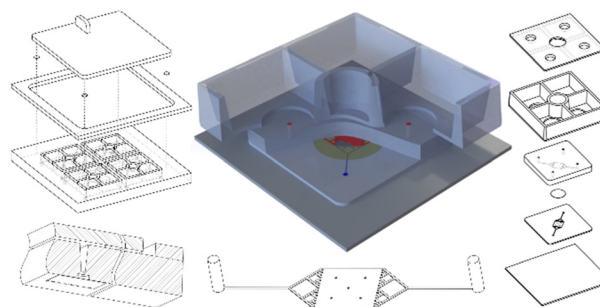
Xuejiao Wang, Xin Li, Aoyang Pu, Ho Bak Shun, Cien Chen, Liqing Ai, Zhaoling Tan, Jilin Zhang, Kai Liu, Jun Gao,* Kiwon Ban* and Xi Yao*



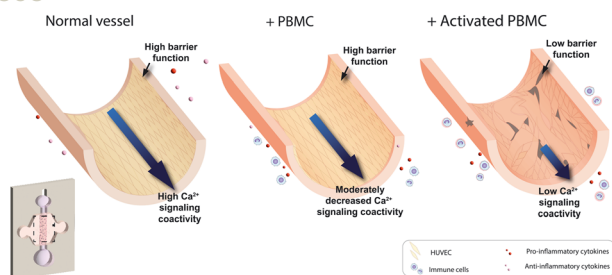
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Aishwarya Rengarajan, Hannah E. Goldblatt, David J. Beebe, María Virumbrales-Muñoz and Derek S. Boeldt*

