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Customer & Collaborator Publications

These papers either illustrate the use of MicroFab equipment or intellectual property; or provide the scientific basis for the development or use of MicroFab equipment or intellectual property. They are grouped under the following categories: [Biomedical](#), [Photonics & Energy](#), [Electronics](#), [Rapid Prototyping and 3D printing](#), [Polymers, MEMS & Sensors](#). Some papers might fit more than one category and are generally placed according to the main application. Some of the papers do not fit one of the main categories so they are placed under [Other](#).

Biomedical

1. Irina Drachuk, Rattanon Suntivich, Rossella Calabrese, Svetlana Harbaugh, Nancy Kelley-Loughnane, David L. Kaplan, Morley Stone, and Vladimir V. Tsukruk, Printed Dual Cell Arrays for Multiplexed Sensing, ACS Biomater. Sci. Eng., 2015, 1 (5), pp 287–294, DOI: 10.1021/ab500085k
2. High throughput cryopreservation of cells by rapid freezing of sub- μ l drops using inkjet printing – cryoprinting, Rui Dou, Rachel E. Saunders, Lisa Mohamet, Christopher M. Ward and Brian Derby, Lab Chip, 2015,15, 3503-3513, DOI: 10.1039/C5LC00674K
3. Wean Sin Cheow, Tie Yi Kiew, Kunn Hadinoto, Combining inkjet printing and amorphous nanonization to prepare personalized dosage forms of poorly-soluble drugs, European Journal of Pharmaceutics and Biopharmaceutics, Volume 96, October 2015, Pages 314–321
4. Yingnan Sun, Xiaodong Chen, Xiaoguang Zhou, Jinbiao Zhu and Yude Yu, Droplet-in-oil array for picoliter-scale analysis based on sequential inkjet printing, Lab Chip, 2015,15, 2429-2436, DOI: 10.1039/C5LC00356C
5. H.-J. Tong, B. Ouyang, N. Nikolovski, D. M. Lienhard, F. D. Pope, and M. Kalberer, “A new electrodynamic balance (EDB) design for low-temperature studies: application to immersion freezing of pollen extract bioaerosols,” Atmos. Meas. Tech., 8, 1183–1195, 2015, www.atmos-meas-tech.net/8/1183/2015/, doi:10.5194/amt-8-1183-2015
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9. Changxue Xu, Meng Zhang, Yong Huang, Amod Ogale, Jianzhong Fu, Roger R Markwald, Study of droplet formation process during drop-on-demand inkjetting of living cell-laden bioink, *Langmuir* 2014 Aug 21;30(30):9130-8. Epub 2014 Jul 21.
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13. Barbara Lorber, Wen-Kai Hsiao, Ian M Hutchings and Keith R Martin, Adult rat retinal ganglion cells and glia can be printed by piezoelectric inkjet printing, *Biofabrication*, 6, 2014, doi:10.1088/1758-5082/6/1/015001. Full article available at http://iopscience.iop.org/1758-5090/6/1/015001/pdf/1758-5090_6_1_015001.pdf
14. Changxue Xu, Kyle Christensen, Zhengyi Zhang, Yong Huang, Jianzhong Fu, Roger R. Markwald, "Predictive compensation-enabled horizontal inkjet printing of alginate tubular constructs," *Manufacturing Letters* 1 (2013) 28-32.
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Photonics & Energy

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Electronics

1. Cheng-Han Wu, Weng-Sing Hwang, Study of solder jet bumping process using high-speed digital camera, *Materials Science in Semiconductor Processing*, Volume 31, March 2015, Pages 38–43

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