

Research Publications with Rainmaker Technology

High Density Diffusion-Free Nanowell Arrays (featured on cover)

Bharath R. Takulapalli, Ji Qiu, D. Mitchell Magee, Peter Kahn, Al Brunner, Kristi Barker, Steven Means, Shane Miersch, Xiaofang Bian, Alex Mendoza, Fernanda Festa, Karan Syal, Jin G. Park, Joshua LaBaer, and Peter Wiktor

Journal of Proteome Research 2012 11 (8), 4382-4391

DOI: 10.1021/pr300467q (2013)

Antiviral Antibody Profiling by High-density Protein Arrays

Bian, X., Wiktor, P., Kahn, P., Brunner, A., Khela, A., Karthikeyan, K., Barker, K., Yu, X., Magee, M., Wasserfall, C. H., Gibson, D., Rooney, M. E., Qiu, J. and LaBaer, J.,
Proteomics, 15: 2136-2145.

doi: 10.1002/pmic.201400612 (2015)

Microreactor Array Device

Peter Wiktor, Al Brunner, Peter Kahn, Ji Qiu, Mitch Magee, Xiaofang Bian, Kailash Karthikeyan and Joshua LaBaer

Scientific Reports 5, Article number: 8736 doi:10.1038/srep08736 (2015)

A Contra Capture Protein Array Platform for Studying Post-translationally Modified (PTM) Auto-antigenomes.

Karthikeyan K, Barker K, Tang Y, Kahn P, Wiktor P, Brunner A, Knabben V, Takulapalli B, Buckner J, Nepom G, LaBaer J, Qiu J.

Mol Cell Proteomics. 2016 Jul;15(7):2324-37. doi: 10.1074/mcp.M115.057661. (2016)

A new method for vitrifying samples for cryoEM.

Razinkov I, Dandey VP, Wei H, Zhang Z, Melnekoff D, Rice WJ, Wigge C, Potter CS, Carragher B.
J Struct Biol. 195(2):190-198. (2016)

ABH-glycan microarray characterizes ABO subtype antibodies: fine specificity of immune tolerance after ABO-incompatible transplantation

Mylvaganam Jeyakanthan, .. Lori J. West

American Journal of Transplantation

doi: 10.1111/ajt.13625 (2015, Accepted in advance of publication).

Nanoprobe NAPPAs Arrays for the Nanoconductimetric Analysis of Ultra-Low-Volume Protein Samples Using Piezoelectric Liquid Dispensing Technology

Eugenia Pechkova, Peter Wiktor, Nicola Bragazzi, Fernanda Festa, Claudio Nicolini

NanoWorld Journal 04/2015; 1(1):26-31. DOI: 10.17756/nwj.2015-004

Measurement of Small Molecule Binding Kinetics on a Protein Microarray by Plasmonic-Based Electrochemical Impedance Imaging

Wenbin Liang, S Wang, F Festa, P Wiktor, W Wang, M Magee, J LaBaer, Nongjian Tao

Analytical Chemistry 08/2014; 86(19). DOI:10.1021/ac5024556

Spotiton: A prototype for an integrated inkjet dispense and vitrification system for cryo-TEM

Tilak Jain, Patrick Sheehan, John Crum, Bridget Carragher, Clinton S. Potter
Journal of Structural Biology, Volume 179, Issue 1, (2012)

In situ electroporation of surface-bound siRNAs in microwell arrays

Tilak Jain, Adrian Papas, Amol Jadhav, Ryan McBride and Enrique Saez
Lab Chip, 2012, 12, 939

We gratefully acknowledge the NATIONAL INSTITUTES OF HEALTH for supporting Engineering Arts research and commercialization efforts.

Grant Numbers: 5R42RR031446, 5R42GM106704, 1R43HG006822, 1R43GM108126

We gratefully acknowledge our academic collaboration with the Arizona State University Biodesign Institute for all the hard work and guidance during the development of the Rainmaker v2 instrument.

We gratefully acknowledge our academic collaboration with NYSBC/NRAMM for all the hard work and guidance during the development of the Spotiton Cryo-EM instrument.