

# Patents and Research Publications with Rainmaker Technology, CryoEM Focus

US Patent US9702795

Apparatus and method for producing specimens for electron microscopy

*Issued: 11 July, 2017*

*Carragher; Bridget, Potter; Clinton S., Jain; Tilak , Kahn; Peter, Wiktor; Peter*

Time-resolved cryoEM using Spotiton

10 Aug 2020, Nature Methods, Brief Communication

*Venkata P. Dandey, William C. Budell, Hui Wei, Daija Bobe, Kashyap Maruthi, Mykhailo Kopylov, Edward Eng, Peter A. Kahn, Jenny E. Hinshaw, Nidhi Kundu, Crina M. Nimigean, Chen Fan, Nattakan Sukomon, Seth Darst, Ruth Saecker, James Chen, Brandon Malone, Clinton S. Potter, Bridget Carragher*

Spotiton: New features and applications

Journal of Structural Biology, Volume 202, Issue 2, (2018)

*Venkata P. Dandey, Hui Wei, Zhening Zhang, Yong Zi Tan, Priyamvada Acharya, Edward T. Eng, William J. Rice, Peter A. Kahn, Clinton S. Potter, Bridget Carragher*

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*

*Journal of Structural Biology, 195(2):190-198. (2016)*

Spotiton: A prototype for an integrated inkjet dispense and vitrification system for cryoTEM

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

A Microdroplet-Based Colorimetric Sensing Platform on a CMOS Imager Chip

*Kyle R. Mallires, Di Wang, Peter Wiktor, and Nongjian Tao*

*Analytical Chemistry 2020 92 (13), 9362-9369*

*DOI: 10.1021/acs.analchem.0c0175*

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# Patents and Research Publications with Rainmaker Technology, Microarray Focus

## Programmable Arrays

*WIPO Patent Application WO/2013/063126*

*PROGRAMMABLE ARRAYS, Published May 2, 2013*

*ARIZONA BOARD OF REGENTS, a body corporate of the state of arizona, acting for and on behalf of ARIZONA STATE UNIVERSITY (1475 N. Scottsdale Road, Suite 200 Scottsdale, AZ, 85257, US)*

## 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)*

## 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*

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*

Multiplexed Nucleic Acid Programmable Protein Arrays

*September 2017, Theranostics 7(16):4057-4070*  
*Xiaobo Yu, Lusheng Song, et al.*

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