

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

2020-04-20, Nature Methods (in review)

Venkata P. Dandey, ProfileWilliam 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

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)

Time-resolved cryoEM using Spotiton

10 Aug 2020, Nature Methods, Brief Communication

Venkata P. Dandey, ProfileWilliam 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

See more patents and research on the next page!

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 Nanoconductometric 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.

Acknowledgments:

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.