Elain Fu

List of Publications by Year
in descending order

52 papers	5,385 citations	159358 30 h-index	189595 50 g-index
52 all docs	52 docs citations	52 times ranked	5278 citing authors

#	Article	IF	Citations
1	Dry storage of multiple reagent types within a paper microfluidic device for phenylalanine monitoring. Analytical Methods, 2021, 13, 660-671.	1.3	8
2	A survey of 3D printing technology applied to paper microfluidics. Lab on A Chip, 2021, 22, 9-25.	3.1	15
3	Rational design and characterization of a lateral flow assay for canine C-reactive protein in wound exudate. Talanta, 2020, 220, 121319.	2.9	7
4	Characterization methods in porous materials for the rational design of multi-step processing in the context of a paper microfluidic phenylalanine test. Analytical Methods, 2020, 12, 768-780.	1.3	4
5	Paper Microfluidics for POC Testing in Low-Resource Settings. Bioanalysis, 2019, , 325-352.	0.1	0
6	Integrated wax valve for robust fluid control in an electrochemical fabric-based device. Analytical Methods, 2019, 11, 5098-5107.	1.3	8
7	Disposable fabric-based electrochemical sensors fabricated from wax-transfer-printed fluidic cells and stencil-printed electrodes. Analytical Methods, 2018, 10, 3696-3703.	1.3	19
8	Progress in the development and integration of fluid flow control tools in paper microfluidics. Lab on A Chip, 2017, 17, 614-628.	3.1	108
9	Rapid Diagnostic Assay for Intact Influenza Virus Using a High Affinity Hemagglutinin Binding Protein. Analytical Chemistry, 2017, 89, 6608-6615.	3.2	17
10	Porous stamp-based reagent patterning for lateral flow immunoassays. Analytical Methods, 2017, 9, 2751-2756.	1.3	3
11	Disposable Autonomous Device for Swab-to-Result Diagnosis of Influenza. Analytical Chemistry, 2017, 89, 5776-5783.	3.2	37
12	Wax transfer printing to enable robust barrier definition in devices based on non-standard porous materials. Journal of Micromechanics and Microengineering, 2017, 27, 057001.	1.5	5
13	Development of a Whole Blood Paper-Based Device for Phenylalanine Detection in the Context of PKU Therapy Monitoring. Micromachines, 2016, 7, 28.	1.4	35
14	Investigation of Reagent Delivery Formats in a Multivalent Malaria Sandwich Immunoassay and Implications for Assay Performance. Analytical Chemistry, 2016, 88, 2311-2320.	3.2	29
15	Immobilizing affinity proteins to nitrocellulose: a toolbox for paper-based assay developers. Analytical and Bioanalytical Chemistry, 2016, 408, 1335-1346.	1.9	69
16	A versatile valving toolkit for automating fluidic operations in paper microfluidic devices. Lab on A Chip, 2015, 15, 1432-1444.	3.1	128
17	Conversion of a laboratory-based test for phenylalanine detection to a simple paper-based format and implications for PKU screening in low-resource settings. Analyst, The, 2015, 140, 609-615.	1.7	21
18	Long-term dry storage of an enzyme-based reagent system for ELISA in point-of-care devices. Analyst, The, 2014, 139, 1456-1462.	1.7	120

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19	Enabling robust quantitative readout in an equipment-free model of device development. Analyst, The, 2014, 139, 4750-4757.	1.7	43
20	Programming paper networks for point of care diagnostics. , 2013, , .		21
21	Dissolvable Bridges for Manipulating Fluid Volumes in Paper Networks. Analytical Chemistry, 2013, 85, 11201-11204.	3.2	90
22	Dissolvable fluidic time delays for programming multi-step assays in instrument-free paper diagnostics. Lab on A Chip, 2013, 13, 2840.	3.1	243
23	Tunable-Delay Shunts for Paper Microfluidic Devices. Analytical Chemistry, 2013, 85, 11545-11552.	3.2	143
24	Progress in the development of paper-based diagnostics for low-resource point-of-care settings. Bioanalysis, 2013, 5, 2821-2836.	0.6	68
25	Controlled release of dry reagents in porous media for tunable temporal and spatial distribution upon rehydration. Lab on A Chip, 2012, 12, 4321.	3.1	62
26	Two-Dimensional Paper Network Format That Enables Simple Multistep Assays for Use in Low-Resource Settings in the Context of Malaria Antigen Detection. Analytical Chemistry, 2012, 84, 4574-4579.	3.2	239
27	Enhanced Sensitivity of Lateral Flow Tests Using a Two-Dimensional Paper Network Format. Analytical Chemistry, 2011, 83, 7941-7946.	3.2	196
28	Perspective on Diagnostics for Global Health. IEEE Pulse, 2011, 2, 40-50.	0.1	48
29	Two-dimensional paper networks: programmable fluidic disconnects for multi-step processes in shaped paper. Lab on A Chip, 2011, 11, 4274.	3.1	145
30	Transport in two-dimensional paper networks. Microfluidics and Nanofluidics, 2011, 10, 29-35.	1.0	261
31	Chemical signal amplification in two-dimensional paper networks. Sensors and Actuators B: Chemical, 2010, 149, 325-328.	4.0	172
32	Controlled reagent transport in disposable 2D paper networks. Lab on A Chip, 2010, 10, 918.	3.1	319
33	Microfluidics without pumps: reinventing the T-sensor and H-filter in paper networks. Lab on A Chip, 2010, 10, 2659.	3.1	296
34	Visualization and measurement of flow in two-dimensional paper networks. Lab on A Chip, 2010, 10, 2614.	3.1	75
35	Modeling of a Competitive Microfluidic Heterogeneous Immunoassay: Sensitivity of the Assay Response to Varying System Parameters. Analytical Chemistry, 2009, 81, 3407-3413.	3.2	26
36	Demonstration of multi-analyte patterning using piezoelectric inkjet printing of multiple layers. Analytica Chimica Acta, 2008, 611, 80-88.	2.6	45

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37	Conditioning saliva for use in a microfluidic biosensor. Lab on A Chip, 2008, 8, 1847.	3.1	40
38	Experimental and model investigation of the time-dependent 2-dimensional distribution of binding in a herringbone microchannel. Lab on A Chip, 2008, 8, 557.	3.1	26
39	Microcontact Printed Antibodies on Gold Surfaces:â€‰ Function, Uniformity, and Silicone Contamination. Langmuir, 2008, 24, 3628-3635.	1.6	20
40	Investigation of heterogeneous electrochemical processes using multi-stream laminar flow in a microchannel. Lab on A Chip, 2007, 7, 441.	3.1	3
41	A method for characterizing adsorption of flowing solutes to microfluidic device surfaces. Lab on A Chip, 2007, 7, 281-285.	3.1	16
42	Dependence of the signal amplification potential of colloidal gold nanoparticles on resonance wavelength in surface plasmon resonance-based detection. Analytica Chimica Acta, 2007, 599, 118-123.	2.6	19
43	Resonance wavelength-dependent signal of absorptive particles in surface plasmon resonance-based detection. Sensors and Actuators B: Chemical, 2007, 123, 606-613.	4.0	10
44	SPR Imaging-Based Salivary Diagnostics System for the Detection of Small Molecule Analytes. Annals of the New York Academy of Sciences, 2007, 1098, 335-344.	1.8	40
45	Compact, high performance surface plasmon resonance imaging system. Biosensors and Bioelectronics, 2007, 22, 2208-2215.	5.3	66
46	Lateral Spread of an Amplification Signal Using an Enzymatic System on a Conductive Surface. Langmuir, 2006, 22, 7451-7453.	1.6	9
47	Microfluidic diagnostic technologies for global public health. Nature, 2006, 442, 412-418.	13.7	1,840
48	One-dimensional surface plasmon resonance imaging system using wavelength interrogation. Review of Scientific Instruments, 2006, 77, 076106.	0.6	9
49	Characterization of a wavelength-tunable surface plasmon resonance microscope. Review of Scientific Instruments, 2004, 75, 2300-2304.	0.6	41
50	Suppression of non-specific adsorption using sheath flow. Lab on A Chip, 2004, 4, 438.	3.1	36
51	Wavelength-tunable surface plasmon resonance microscope. Review of Scientific Instruments, 2003, 74, 3182-3184.	0.6	40
52	Measurement of the anisotropy ratio during current-induced step bunching. Surface Science, 1995, 336, L746-L752.	0.8	45