Jennifer Blain Christen

List of Publications by Year
in descending order

62 papers	528 citations	759233 12 h-index	839539 18 g-index
62 all docs	62 docs citations	62 times ranked	771 citing authors

#	Article	IF	Citations
1	Design, Fabrication, and Testing of a Hybrid CMOS/PDMS Microsystem for Cell Culture and Incubation. IEEE Transactions on Biomedical Circuits and Systems, 2007, 1, 3-18.	4.0	72
2	Eccrine Sweat as a Biofluid for Profiling Immune Biomarkers. Proteomics - Clinical Applications, 2018, 12, e1800010.	1.6	55
3	Application of Flexible OLED Display Technology for Electro-Optical Stimulation and/or Silencing of Neural Activity. Journal of Display Technology, 2014, 10, 514-520.	1.2	50
4	Seamless integration of CMOS and microfluidics using flip chip bonding. Journal of Micromechanics and Microengineering, 2013, 23, 035009.	2.6	43
5	Application of Flexible OLED Display Technology to Point-of-Care Medical Diagnostic Testing. Journal of Display Technology, 2016, 12, 273-280.	1.2	36
6	Application of flat panel OLED display technology for the point-of-care detection of circulating cancer biomarkers. Scientific Reports, 2016, 6, 29057.	3.3	29
7	Application of flexible flat panel display technology to wearable biomedical devices. Electronics Letters, 2015, 51, 1312-1314.	1.0	28
8	Experimental and Simulated Cycling of ISFET Electric Fields for Drift Reset. IEEE Electron Device Letters, 2013, 34, 456-458.	3.9	26
9	Biosensing platform on a flexible substrate. Sensors and Actuators B: Chemical, 2015, 210, 197-203.	7.8	20
10	Fully differential current-mode MEMS dual-axis optical inclination sensor. Sensors and Actuators A: Physical, 2013, 192, 133-139.	4.1	17
11	Real-time feedback control of pH within microfluidics using integrated sensing and actuation. Lab on A Chip, 2014, 14, 1191.	6.0	17
12	Optogenetic neurostimulation of auricular vagus using flexible OLED display technology to treat chronic inflammatory disease and mental health disorders. Electronics Letters, 2016, 52, 900-902.	1.0	15
13	A self-powered single-axis maximum power direction tracking system with an on-chip sensor. Solar Energy, 2015, 112, 100-107.	6.1	11
14	Pulse width modulation circuit for ISFET drift reset. , 2013, , .		8
15	On-chip sensor for light direction detection. Optics Letters, 2013, 38, 4554.	3.3	8
16	Characterization of a compact and highly sensitive fluorescence-based detection system for point-of-care applications. , 2016, , .		7
17	CMOS sensor for sun tracking. , 2013, , .		6
18	CMOS potentiostat for chemical sensing applications. , 2013, , .		6

#	Article	IF	Citations
19	MEMS optical position sensor for sun tracking. , 2015, , .		6
20	Toward wearable, crowd-sourced air quality monitoring for respiratory disease. , 2017, , .		6
21	Reactive nanolayers for physiologically compatible microsystem packaging. Journal of Materials Science: Materials in Electronics, 2010, 21, 562-566.	2.2	5
22	A point of care electrochemical impedance spectroscopy device. , 2015, , .		5
23	A portable impedance-based electrochemical measurement device. , 2016, , .		5
24	Highly sensitive fluorescence-based lateral flow platform for point-of-care detection of biomarkers in plasma. , 2017, , .		5
25	Detecting Gas Vapor Leaks through Uncalibrated Sensor Based CPS. , 2019, , .		5
26	CMOS self-powered monolithic light-direction sensor with digitalized output. Optics Letters, 2014, 39, 2618.	3.3	4
27	CMOS-based on-chip electrochemical sensor. , 2014, , .		4
28	Contactless fluorescence imaging with a CMOS image sensor. , 2011, , .		3
29	Making unreliable Chem-FET sensors smart via soft calibration. , 2016, , .		3
30	Colorimetric Point-of-Care Human Papillomavirus Diagnostic Reader. , 2019, , .		3
31	Mobile and Efficient Temperature and Humidity Control Chamber for Point-of-Care Diagnostics. , 2019, , .		3
32	A Self-Biased Operational Transconductance Amplifier in 0.18 micron 3D SOI-CMOS. , 2007, , .		2
33	An optoelectronic/microfluidic inclination sensor for vestibular implants. , 2009, , .		2
34	CMOS biosensor system for on-chip cell culture with read-out circuitry and microfluidic packaging. , 2012, 2012, 4990-3.		2
35	Hydrogel Check-Valves for the Treatment of Hydrocephalic Fluid Retention with Wireless Fully-Passive Sensor for the Intracranial Pressure Measurement. Gels, 2022, 8, 276.	4.5	2
36	Amplification circuit and microelectrode array for HL-1 Cardiomyocyte action potential measurement. , 2010, , .		1

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37	A multiparametric biosensor array for on-chip cell culture with feedback controlled microfluidics. , 2011, , .		1
38	A neural rehabilitation chip with neural recording, peak detection, spike rate counter, and biphasic neural stimulator. , 2014, , .		1
39	An on-chip system to monitor the pH of cell culture media. , 2014, 2014, 2745-8.		1
40	Characterization and application of a discrete quartz extended-gate ISFET for the assessment of tumor cell viability. , 2016, , .		1
41	Adapting large-area flexible hybrid TFT/CMOS electronics and display technology to create an optical sensor array architecture. , 2017, , .		1
42	Human factors engineering for mobile health applications. , 2017, , .		1
43	Variable self-powered light detection CMOS chip with real-time adaptive tracking digital output based on a novel on-chip sensor. Optics Express, 2017, 25, 24138.	3.4	1
44	Assay Development and Storage for Fluorescence-Based Lateral Flow Immunoassay. , 2018, , .		1
45	Localized closed-loop temperature control and regulation in hybrid silicon/silicone life science microsystems. , 2007, , .		0
46	Design, Analysis and Implementation of Integrated Micro-Thermal Control Systems. , 2007, , .		0
47	Ultra-high ratio dilution microfluidic system for single strand DNA isolation. , 2008, , .		0
48	Fabrication and characterization of a silicone fluorescent oxygen sensor. , 2010, , .		0
49	On-chip cell culture biosensing with microfluidic feedback control. , 2011, , .		0
50	A fully-adjustable dynamic range capacitance sensing circuit in a 0.15µm 3D SOI process. , 2011, , .		0
51	A self-powered 2-dimensional motion detection chip. , 2014, 2014, 3731-4.		0
52	A CMOS self-powered monolithic light direction sensor with SAR ADC. , 2014, , .		0
53	An integrated system for continuous assessment of intercellular pH. , 2014, , .		0
54	Floating gate ISFET for therapeutic drug screening of breast cancer cells. , 2014, , .		0

#	Article	IF	Citations
55	Adaptive digital x-ray detector for high sensitivity medical fluoroscopy imaging. , 2015, , .		0
56	Application of Flexible Display Technology to Low Cost Multiplexed Point-of-Care Medical Diagnostic Testing. Journal of Global Oncology, 2016, 2, 14s-14s.	0.5	0
57	Guest Editorialâ€"ISCAS 2015 Special Issue. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 797-798.	4.0	0
58	Effects of relative humidity, temperature, and geometry on fluid flow rate in lateral flow immunoassays. , 2019, , .		0
59	3D Printed Microfluidic Actuation System for Multi-step Paper-based Assays. , 2019, , .		0
60	Enabling Large-scale Fine-grained Simulation of IED Vapor Concentration in Open-air Environments. , 2020, , .		0
61	Hybrid Silicon/Silicone (polydimethylsiloxane) Microsystem for Cell Culture. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
62	Exploring Model-based Failure Prediction of Passive Bio-electro-mechanical Implants. , 2022, , .		0