

Greg Bridges

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1508204/publications.pdf>

Version: 2024-02-01

96
papers

1,412
citations

331670

21
h-index

361022

35
g-index

96
all docs

96
docs citations

96
times ranked

1245
citing authors

#	ARTICLE	IF	CITATIONS
1	A microwave interferometric system for simultaneous actuation and detection of single biological cells. Lab on A Chip, 2009, 9, 3406.	6.0	98
2	Filter-Antenna Module Using Substrate Integrated Waveguide Cavities. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 59-62.	4.0	83
3	Asymptotic Limits of Negative Group Delay in Active Resonator-Based Distributed Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1727-1735.	5.4	78
4	RF Cavity Passive Wireless Sensors With Time-Domain Gating-Based Interrogation for SHM of Civil Structures. IEEE Sensors Journal, 2009, 9, 1430-1438.	4.7	66
5	A Wireless Passive Sensor for Temperature Compensated Remote pH Monitoring. IEEE Sensors Journal, 2013, 13, 2428-2436.	4.7	65
6	Microwave frequency sensor for detection of biological cells in microfluidic channels. Biomicrofluidics, 2009, 3, 034103.	2.4	64
7	Wireless Passive Sensors for Food Quality Monitoring: Improving the Safety of Food Products. IEEE Antennas and Propagation Magazine, 2020, 62, 76-89.	1.4	52
8	Non-destructive detection of fish spoilage using a wireless basic volatile sensor. Talanta, 2015, 134, 718-723.	5.5	51
9	The changing dielectric properties of CHO cells can be used to determine early apoptotic events in a bioprocess. Biotechnology and Bioengineering, 2013, 110, 2902-2914.	3.3	46
10	Differential electronic detector to monitor apoptosis using dielectrophoresis-induced translation of flowing cells (dielectrophoresis cytometry). Biomicrofluidics, 2013, 7, 024101.	2.4	39
11	â€œZeptofaradâ€ (10 ⁻²¹ â€F) resolution capacitance sensor for scanning capacitance microscopy. Review of Scientific Instruments, 2001, 72, 2618-2623.	1.3	38
12	Embeddable wireless strain sensor based on resonant rf cavities. Review of Scientific Instruments, 2005, 76, 094703.	1.3	38
13	Dielectric model for Chinese hamster ovary cells obtained by dielectrophoresis cytometry. Biomicrofluidics, 2016, 10, 014111.	2.4	38
14	Torque-mixing magnetic resonance spectroscopy. Science, 2015, 350, 798-801.	12.6	37
15	Bilateral Gain-Compensated Negative Group Delay Circuit. IEEE Microwave and Wireless Components Letters, 2011, 21, 308-310.	3.2	35
16	Membrane dielectric dispersion in nanosecond pulsed electroporation of biological cells. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1256-1265.	2.9	33
17	Monitoring acidic and basic volatile concentration using a pH-electrode based wireless passive sensor. Sensors and Actuators B: Chemical, 2015, 209, 803-810.	7.8	33
18	Corrosion Potential Sensor for Remote Monitoring of Civil Structure Based on Printed Circuit Board Sensor. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2422-2431.	4.7	29

#	ARTICLE	IF	CITATIONS
19	Fluid Embeddable Coupled Coil Sensor for Wireless pH Monitoring in a Bioreactor. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1337-1346.	4.7	23
20	Multi-Frequency DEP Cytometer Employing a Microwave Sensor for Dielectric Analysis of Single Cells. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-9.	4.6	23
21	Electrode Potential-Based Coupled Coil Sensor for Remote pH Monitoring. IEEE Sensors Journal, 2011, 11, 2813-2819.	4.7	22
22	High-frequency pattern extraction in digital integrated circuits using scanning electrostatic force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 1375.	1.6	20
23	Quantitative Model for Ion Transport and Cytoplasm Conductivity of Chinese Hamster Ovary Cells. Scientific Reports, 2018, 8, 17818.	3.3	19
24	Scanned electrostatic force microscope for noninvasive high frequency potential measurement. Applied Physics Letters, 1994, 64, 1442-1444.	3.3	18
25	Radar Cross Section-Based Chipless Tag With Built-In Reference for Relative Humidity Monitoring of Packaged Food Commodities. IEEE Sensors Journal, 2021, 21, 18773-18780.	4.7	18
26	Sampled waveform measurement in integrated circuits using heterodyne electrostatic force microscopy. Review of Scientific Instruments, 1994, 65, 3378-3381.	1.3	17
27	A Compact Wireless Passive Harmonic Sensor for Packaged Food Quality Monitoring. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 2389-2397.	4.6	17
28	Progression of change in membrane capacitance and cytoplasm conductivity of cells during controlled starvation using dual-frequency DEP cytometry. Analytica Chimica Acta, 2019, 1059, 59-67.	5.4	16
29	Nondestructive two-dimensional phase imaging of embedded defects via on-chip spintronic sensor. Applied Physics Letters, 2012, 100, 252406.	3.3	14
30	Parallel pseudorandom number generation in GaAs cellular automata for high speed circuit testing. Journal of Electronic Testing: Theory and Applications (JETTA), 1995, 6, 325-330.	1.2	13
31	Dielectrophoresis study of temporal change in internal conductivity of single CHO cells after electroporation by pulsed electric fields. Biomicrofluidics, 2017, 11, 014111.	2.4	13
32	Dielectric Properties of Single Cells Subjected to Heat Shock Using DEP Cytometry. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5933-5940.	4.6	13
33	Single cell dielectrophoresis study of apoptosis progression induced by controlled starvation. Bioelectrochemistry, 2018, 124, 73-79.	4.6	13
34	Direct evidence of "spring softening" nonlinearity in micromachined mechanical resonator using optical beam deflection technique. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 732-736.	2.1	12
35	An Ultra Wideband (UWB) Mixer with 0.18UM RF CMOS Technology. , 2006, , .		11
36	Microelectromechanical Resonator Characterization Using Noncontact Parametric Electrostatic Excitation and Probing. Journal of Microelectromechanical Systems, 2007, 16, 1054-1060.	2.5	11

#	ARTICLE	IF	CITATIONS
37	High frequency potential probe using electrostatic force microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 2591-2594.	2.1	10
38	Non-contact probing of high speed microelectronics using electrostatic force sampling. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 830-833.	2.1	9
39	Quantitative two-dimensional carrier profiling of a 400 nm complementary metal-oxide-semiconductor device by Schottky scanning capacitance microscopy. Journal of Applied Physics, 2000, 88, 6752-6757.	2.5	9
40	Capacitance sensor with sub-zeptofarad ($<10^{21}$ F) sensitivity for scanning capacitance microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 479.	1.6	9
41	A Compact Wireless Passive Harmonic Sensor for Ammonia Sensing in Packaged Food. , 2022, 6, 1-4.		9
42	Wireless passive sensor for pH monitoring inside a small bioreactor. , 2013, , .		8
43	High resolution sampling electrostatic force microscopy using pulse width modulation technique. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 626.	1.6	7
44	Quantitative voltage measurement of high-frequency internal integrated circuit signals by scanning probe microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 999-1003.	2.1	7
45	Coupled coil sensor for detecting surface corrosion on steel reinforcement. , 2010, , .		7
46	Cytoplasmic conductivity as a marker for bioprocess monitoring: Study of Chinese hamster ovary cells under nutrient deprivation and reintroduction. Biotechnology and Bioengineering, 2019, 116, 2896-2905.	3.3	7
47	Transient-imposed limitations of negative group delay circuits. , 2010, , .		6
48	Monitoring the dielectric response of single cells following mitochondrial adenosine triphosphate synthase inhibition by oligomycin using a dielectrophoretic cytometer. Biomicrofluidics, 2014, 8, 064114.	2.4	6
49	Near field chipless tag for food quality monitoring. , 2014, , .		6
50	Parallel single-cell optical transit dielectrophoresis cytometer. Electrophoresis, 2020, 41, 720-728.	2.4	6
51	Full Beta-Dispersion Region Dielectric Spectra and Dielectric Models of Viable and Non-Viable CHO Cells. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 70-77.	3.4	6
52	On the potential use of cellular automata machines for electromagnetic field solution. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1995, 8, 301-312.	1.9	5
53	A wireless passive pH sensor for real-time in vivo milk quality monitoring. , 2012, , .		5
54	Change in the dielectric response of single cells induced by nutrient deprivation over a wide frequency range. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
55	Contactless Air-Filled Substrate-Integrated Waveguide (CLAF-SIW) Resonator for Wireless Passive Temperature Sensing. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3724-3731.	4.6	5
56	Heterodyne electrostatic imaging of polarization due to a surface acoustic wave. Applied Physics Letters, 2001, 79, 3729-3731.	3.3	4
57	Full-wave-based transmission-line model for lossy-substrate multiconductor interconnects. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 103-115.	1.9	4
58	An embedded inductively coupled printed circuit board based corrosion potential sensor. , 2013, , .		4
59	Multi-frequency DEP cytometer employing a microwave interferometer for the dielectric analysis of micro-particles. , 2015, , .		4
60	Buried cable parameter extraction using a full-space unbounded conformal mapping technique. , 2009, , .		3
61	A wireless passive pH sensor based on pH electrode potential measurement. , 2010, , .		3
62	In-flow dielectric characterization of single biological cells using a wideband DEP cytometer. , 2016, , .		3
63	Microwave Near-Field Detection of Single Biological Cells and Nanoparticles. , 2018, , .		3
64	In-Flow Dielectrophoresis Sensor for Measuring the Dielectric Spectrum of Single Cells: Viable and Non-viable Cells. , 2019, , .		3
65	Resolution enhancement in probing of high-speed integrated circuits using dynamic electrostatic force-gradient microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 948.	2.1	2
66	The effect of dielectric relaxation in nanosecond pulse electroporation of biological cells. , 2010, , .		2
67	Wireless Passive Sensor for Remote pH Monitoring. Journal of Nanotechnology in Engineering and Medicine, 2011, 2, .	0.8	2
68	Gain compensated symmetric loaded transmission line exhibiting bidirectional negative group delay. Applied Physics A: Materials Science and Processing, 2012, 109, 1087-1093.	2.3	2
69	Design procedure of a filter-antenna module implemented in substrate integrated waveguide technology. Analog Integrated Circuits and Signal Processing, 2012, 73, 895-907.	1.4	2
70	An MST-based microwave tomography system using homodyne receiver. , 2013, , .		2
71	Microfluidic device for simultaneous pulsed electric field electroporation and dielectrophoresis studies of single biological cells. , 2013, , .		2
72	DEP Measurement of the Dielectric Properties of Single CHO Cells Under Thermal Stress. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
73	RCS Based Depolarizing Passive Tag with Improved Clutter Rejection for Potentiometric Gas Sensing. , 2019, , .		2
74	Prototyping of Novel Isolator Design Based on Cavity Magnonics. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3020-3028.	4.6	2
75	Noncontact internal probing of microwave integrated circuits. , 1998, , .		1
76	Efficient simulation of multiconductor transmission lines using order-reduction techniques. , 2000, , .		1
77	Evaluation of dissipation within an ILGA for computational electromagnetics. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2004, 17, 1-15.	1.9	1
78	Finite Formulation for Modeling Guided Wave Structures Embedded in a Lossy Half-Space. International Journal for Computational Methods in Engineering Science and Mechanics, 2010, 11, 146-156.	2.1	1
79	A wireless passive sensor for pH monitoring employing temperature compensation. , 2011, , .		1
80	Semi-automated detection of single cell signatures from a dielectrophoretic cytometer. , 2013, , .		1
81	An inductively coupled passive tag for remote basic volatile sensing. , 2014, , .		1
82	Near-field coupled RFID tag for carbon dioxide concentration sensing. , 2015, , .		1
83	Two-frequency dielectrophoresis analysis of viable/non-viable single CHO cells employing a microwave cytometer. , 2016, , .		1
84	Radar Cross Section Based Passive Wireless Sensor for Volatile Sensing. , 2018, , .		1
85	UHF Measurement of Partial Discharge on Stator Bars Using Patch Antennas. , 2019, , .		1
86	TDR-Based Fault Detection in Grounding Electrodes Using a Rod Insertion Method. , 2021, , .		1
87	Dielectric Properties of Cells. , 2019, , 585-598.		1
88	Application of lattice gas automata to electromagnetic scattering and transmission line modelling. , 2000, , .		0
89	Location of Current Carrying Faults in Integrated Circuits by Magnetic Force Microscopy. Materials Research Society Symposia Proceedings, 2002, 738, 7201.	0.1	0
90	Equivalent circuit model for photonic bandgap microstrip lines with ground plane perforations. , 2004, , .		0

#	ARTICLE	IF	CITATIONS
91	Integration of an FDTD analysis of lossy multiconductor transmission lines within a general-purpose circuit simulator. , 2004, , .		0
92	Simulation of transients on frequency dependent transmission lines using an improved multipoint Pad� approximation technique. , 2004, , .		0
93	High frequency GMI measurement of soft magnetic co-based ribbons. , 2004, , .		0
94	Dielectrophoresis study of electroporation effects on Chinese hamster ovary cells. , 2014, , .		0
95	Stacked coupled-coil approach for multi-parameter passive wireless sensing. , 2016, , .		0
96	Enhancements of Non-contact Measurements of Electrical Waveforms on the Proximity of a Signal Surface Using Groups of Pulses. , 2002, , .		0