Greg Bridges

List of Publications by Year
in descending order

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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 Compact Wireless Passive Harmonic Sensor for Packaged Food Quality Monitoring. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 2389-2397.	4.6	17
2	A Compact Wireless Passive Harmonic Sensor for Ammonia Sensing in Packaged Food. , 2022, 6, 1-4.		9
3	Prototyping of Novel Isolator Design Based on Cavity Magnonics. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3020-3028.	4.6	2
4	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
5	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
6	TDR-Based Fault Detection in Grounding Electrodes Using a Rod Insertion Method. , 2021, , .		1
7	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
8	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
9	Parallel singleâ€cell optical transit dielectrophoresis cytometer. Electrophoresis, 2020, 41, 720-728.	2.4	6
10	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
11	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
12	In-Flow Dielectrophoresis Sensor for Measuring the Dielectric Spectrum of Single Cells: Viable and Non-viable Cells. , 2019, , .		3
13	UHF Measurement of Partial Discharge on Stator Bars Using Patch Antennas. , 2019, , .		1
14	RCS Based Depolarizing Passive Tag with Improved Clutter Rejection for Potentiometric Gas Sensing. , 2019, , .		2
15	Dielectric Properties of Cells. , 2019, , 585-598.		1
16	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
17	Radar Cross Section Based Passive Wireless Sensor for Volatile Sensing. , 2018, , .		1
18	Microwave Near-Field Detection of Single Biological Cells and Nanoparticles. , 2018, , .		3

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19	Quantitative Model for Ion Transport and Cytoplasm Conductivity of Chinese Hamster Ovary Cells. Scientific Reports, 2018, 8, 17818.	3.3	19
20	DEP Measurement of the Dielectric Properties of Single CHO Cells Under Thermal Stress. , 2018, , .		2
21	Single cell dielectrophoresis study of apoptosis progression induced by controlled starvation. Bioelectrochemistry, 2018, 124, 73-79.	4.6	13
22	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
23	Change in the dielectric response of single cells induced by nutrient deprivation over a wide frequency range. , 2017, , .		5
24	Dielectric model for Chinese hamster ovary cells obtained by dielectrophoresis cytometry. Biomicrofluidics, 2016, 10, 014111.	2.4	38
25	Two-frequency dielectrophoresis analysis of viable/non-viable single CHO cells employing a microwave cytometer. , 2016, , .		1
26	In-flow dielectric characterization of single biological cells using a wideband DEP cytometer. , 2016, , .		3
27	Stacked coupled-coil approach for multi-parameter passive wireless sensing. , 2016, , .		0
28	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
29	Multi-frequency DEP cytometer employing a microwave interferometer for the dielectric analysis of micro-particles. , 2015, , .		4
30	Torque-mixing magnetic resonance spectroscopy. Science, 2015, 350, 798-801.	12.6	37
31	Near-field coupled RFID tag for carbon dioxide concentration sensing. , 2015, , .		1
32	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
33	Non-destructive detection of fish spoilage using a wireless basic volatile sensor. Talanta, 2015, 134, 718-723.	5.5	51
34	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
35	Dielectrophoresis study of electroporation effects on Chinese hamster ovary cells. , 2014, , .		0
36	An inductively coupled passive tag for remote basic volatile sensing. , 2014, , .		1

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37	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
38	Near field chipless tag for food quality monitoring. , 2014, , .		6
39	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
40	An embedded inductively coupled printed circuit board based corrosion potential sensor. , 2013, , .		4
41	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
42	Membrane dielectric dispersion in nanosecond pulsed electroporation of biological cells. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1256-1265.	2.9	33
43	An MST-based microwave tomography system using homodyne receiver. , 2013, , .		2
44	Microfluidic device for simultaneous pulsed electric field electroporation and dielectrophoresis studies of single biological cells. , 2013, , .		2
45	Wireless passive sensor for pH monitoring inside a small bioreactor. , 2013, , .		8
46	Semi-automated detection of single cell signatures from a dielectrophoretic cytometer. , 2013, , .		1
47	A Wireless Passive Sensor for Temperature Compensated Remote pH Monitoring. IEEE Sensors Journal, 2013, 13, 2428-2436.	4.7	65
48	Differential electronic detector to monitor apoptosis using dielectrophoresis-induced translation of flowing cells (dielectrophoresis cytometry). Biomicrofluidics, 2013, 7, 024101.	2.4	39
49	A wireless passive pH sensor for real-time in vivo milk quality monitoring. , 2012, , .		5
50	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
51	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
52	Nondestructive two-dimensional phase imaging of embedded defects via on-chip spintronic sensor. Applied Physics Letters, 2012, 100, 252406.	3.3	14
53	Electrode Potential-Based Coupled Coil Sensor for Remote pH Monitoring. IEEE Sensors Journal, 2011, 11, 2813-2819.	4.7	22
54	Bilateral Gain-Compensated Negative Group Delay Circuit. IEEE Microwave and Wireless Components Letters, 2011, 21, 308-310.	3.2	35

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55	A wireless passive sensor for pH monitoring employing temperature compensation. , 2011, , .		1
56	Filter-Antenna Module Using Substrate Integrated Waveguide Cavities. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 59-62.	4.0	83
57	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
58	Wireless Passive Sensor for Remote pH Monitoring. Journal of Nanotechnology in Engineering and Medicine, 2011, 2, .	0.8	2
59	Transient-imposed limitations of negative group delay circuits. , 2010, , .		6
60	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
61	The effect of dielectric relaxation in nanosecond pulse electroporation of biological cells. , 2010, , .		2
62	Coupled coil sensor for detecting surface corrosion on steel reinforcement. , 2010, , .		7
63	A wireless passive pH sensor based on pH electrode potential measurement. , 2010, , .		3
64	Buried cable parameter extraction using a full-space unbounded conformal mapping technique. , 2009, , .		3
65	Microwave frequency sensor for detection of biological cells in microfluidic channels. Biomicrofluidics, 2009, 3, 034103.	2.4	64
66	A microwave interferometric system for simultaneous actuation and detection of single biological cells. Lab on A Chip, 2009, 9, 3406.	6.0	98
67	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
68	Fullâ€waveâ€based transmissionâ€line model for lossyâ€substrate multiconductor interconnects. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 103-115.	1.9	4
69	Microelectromechanical Resonator Characterization Using Noncontact Parametric Electrostatic Excitation and Probing. Journal of Microelectromechanical Systems, 2007, 16, 1054-1060.	2.5	11
70	An Ultra Wideband (UWB) Mixer with 0.18UM RF CMOS Technology. , 2006, , .		11
71	Direct evidence of â€œspring softeningâ€•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
72	Embeddable wireless strain sensor based on resonant rf cavities. Review of Scientific Instruments, 2005, 76, 094703.	1.3	38

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73	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
74	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
75	Equivalent circuit model for photonic bandgap microstrip lines with ground plane perforations. , 2004, , .		0
76	Integration of an FDTD analysis of lossy multiconductor transmission lines within a general-purpose circuit simulator. , 2004, , .		0
77	Simulation of transients on frequency dependent transmission lines using an improved multipoint PadÃ© approximation technique. , 2004, , .		0
78	High frequency GMI measurement of soft magnetic co-based ribbons. , 2004, , .		0
79	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
80	Capacitance sensor with sub-zeptofarad (<10[sup â^'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
81	Location of Current Carrying Faults in Integrated Circuits by Magnetic Force Microscopy. Materials Research Society Symposia Proceedings, 2002, 738, 7201.	0.1	0
82	Enhancements of Non-contact Measurements of Electrical Waveforms on the Proximity of a Signal Surface Using Groups of Pulses. , 2002, , .		0
83	â€œZeptofaradâ€•(10â^'21â€ŠF) resolution capacitance sensor for scanning capacitance microscopy. Review of Scientific Instruments, 2001, 72, 2618-2623.	1.3	38
84	Heterodyne electrostatic imaging of polarization due to a surface acoustic wave. Applied Physics Letters, 2001, 79, 3729-3731.	3.3	4
85	Efficient simulation of multiconductor transmission lines using order-reduction techniques. , 2000, , .		1
86	Application of lattice gas automata to electromagnetic scattering and transmission line modelling. , 2000, , .		0
87	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
88	Quantitative two-dimensional carrier profiling of a 400 nm complementary metalâ€“oxideâ€“semiconductor device by Schottky scanning capacitance microscopy. Journal of Applied Physics, 2000, 88, 6752-6757.	2.5	9
89	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
90	Noncontact internal probing of microwave integrated circuits. , 1998, , .		1

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91	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
92	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
93	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
94	Scanned electrostatic force microscope for noninvasive high frequency potential measurement. Applied Physics Letters, 1994, 64, 1442-1444.	3.3	18
95	Sampled waveform measurement in integrated circuits using heterodyne electrostatic force microscopy. Review of Scientific Instruments, 1994, 65, 3378-3381.	1.3	17
96	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