

Ramon Bragos

List of Publications by Year in descending order

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86
papers

1,734
citations

236925

25
h-index

302126

39
g-index

86
all docs

86
docs citations

86
times ranked

1985
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of a portable biosensor for the analysis of organophosphorus and carbamate insecticides in water and food. <i>Sensors and Actuators B: Chemical</i> , 2008, 133, 195-201.	7.8	92
2	In Vivo and In Situ Ischemic Tissue Characterization Using Electrical Impedance Spectroscopy. <i>Annals of the New York Academy of Sciences</i> , 1999, 873, 51-58.	3.8	86
3	An analog front-end enables electrical impedance spectroscopy system on-chip for biomedical applications. <i>Physiological Measurement</i> , 2008, 29, S267-S278.	2.1	82
4	On-line monitoring of yeast cell growth by impedance spectroscopy. <i>Journal of Biotechnology</i> , 2005, 118, 398-405.	3.8	71
5	Basics of broadband impedance spectroscopy measurements using periodic excitations. <i>Measurement Science and Technology</i> , 2012, 23, 105501.	2.6	71
6	A new measuring and identification approach for time-varying bioimpedance using multisine electrical impedance spectroscopy. <i>Physiological Measurement</i> , 2013, 34, 339-357.	2.1	68
7	Optimal multisine excitation design for broadband electrical impedance spectroscopy. <i>Measurement Science and Technology</i> , 2011, 22, 115601.	2.6	67
8	Transmural Versus Nontransmural In Situ Electrical Impedance Spectrum for Healthy, Ischemic, and Healed Myocardium. <i>IEEE Transactions on Biomedical Engineering</i> , 2004, 51, 1421-1427.	4.2	54
9	Novel Estimation of the Electrical Bioimpedance Using the Local Polynomial Method. Application to In Vivo Real-Time Myocardium Tissue Impedance Characterization During the Cardiac Cycle. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 3376-3385.	4.2	48
10	Electrical impedance spectroscopy measurements using a four-electrode configuration improve on-line monitoring of cell concentration in adherent animal cell cultures. <i>Biosensors and Bioelectronics</i> , 2012, 31, 257-263.	10.1	48
11	FGF-4 increases <i>in vitro</i> expansion rate of human adult bone marrow-derived mesenchymal stem cells. <i>Growth Factors</i> , 2007, 25, 71-76.	1.7	47
12	Passive transmission of ischemic ST segment changes in low electrical resistance myocardial infarct scar in the pig. <i>Cardiovascular Research</i> , 1998, 40, 103-112.	3.8	42
13	Development of a portable biosensor for screening neurotoxic agents in water samples. <i>Talanta</i> , 2008, 75, 1208-1213.	5.5	38
14	In vivo electrical bioimpedance characterization of human lung tissue during the bronchoscopy procedure. A feasibility study. <i>Medical Engineering and Physics</i> , 2013, 35, 949-957.	1.7	38
15	Design and performance of an electrical stimulator for long-term contraction of cultured muscle cells. <i>BioTechniques</i> , 2004, 36, 68-73.	1.8	37
16	Measurement errors in multifrequency bioelectrical impedance analyzers with and without impedance electrode mismatch. <i>Physiological Measurement</i> , 2009, 30, 573-587.	2.1	37
17	Electrical stimulation of cardiac adipose tissue-derived progenitor cells modulates cell phenotype and genetic machinery. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, E76-E83.	2.7	35
18	Online monitoring of myocardial bioprosthesis for cardiac repair. <i>International Journal of Cardiology</i> , 2014, 174, 654-661.	1.7	34

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19	AD5933-based spectrometer for electrical bioimpedance applications. Journal of Physics: Conference Series, 2010, 224, 012011.	0.4	33
20	Novel approach of processing electrical bioimpedance data using differential impedance analysis. Medical Engineering and Physics, 2013, 35, 1349-1357.	1.7	33
21	Current Source for Multifrequency Broadband Electrical Bioimpedance Spectroscopy Systems. A Novel Approach. , 2006, 2006, 5121-5.		30
22	Differentiation of the intracellular structure of slow- versus fast-twitch muscle fibers through evaluation of the dielectric properties of tissue. Physics in Medicine and Biology, 2014, 59, 2369-2380.	3.0	29
23	Percutaneous Electrocatheter Technique for On-Line Detection of Healed Transmural Myocardial Infarction. PACE - Pacing and Clinical Electrophysiology, 2000, 23, 1283-1287.	1.2	28
24	Simple voltage-controlled current source for wideband electrical bioimpedance spectroscopy: circuit dependences and limitations. Measurement Science and Technology, 2011, 22, 115801.	2.6	28
25	Noninvasive Assessment of an Engineered Bioactive Graft in Myocardial Infarction: Impact on Cardiac Function and Scar Healing. Stem Cells Translational Medicine, 2017, 6, 647-655.	3.3	28
26	Electromechanical Conditioning of Adult Progenitor Cells Improves Recovery of Cardiac Function After Myocardial Infarction. Stem Cells Translational Medicine, 2017, 6, 970-981.	3.3	26
27	On the calculation of the D -optimal multisine excitation power spectrum for broadband impedance spectroscopy measurements. Measurement Science and Technology, 2012, 23, 085702.	2.6	25
28	Harmonic impedance spectra identification from time-varying bioimpedance: theory and validation. Physiological Measurement, 2013, 34, 1217-1238.	2.1	25
29	Interpulse multifrequency electrical impedance measurements during electroporation of adherent differentiated myotubes. Bioelectrochemistry, 2015, 105, 123-135.	4.6	25
30	Error analysis and reduction for a simple sensor-microcontroller interface. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 1644-1647.	4.7	24
31	Four Versus Two-Electrode Measurement Strategies for Cell Growing and Differentiation Monitoring Using Electrical Impedance Spectroscopy. , 2006, 2006, 2106-9.		24
32	An implantable bioimpedance monitor using 2.45 GHz band for telemetry. Physiological Measurement, 2013, 34, 1-16.	2.1	24
33	Endocardial infarct scar recognition by myocardial electrical impedance is not influenced by changes in cardiac activation sequence. Heart Rhythm, 2018, 15, 589-596.	0.7	24
34	Biomass Monitoring Using Impedance Spectroscopy. Annals of the New York Academy of Sciences, 1999, 873, 299-305.	3.8	23
35	Propagation of Measurement Errors Through Body Composition Equations for Body Impedance Analysis. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1535-1544.	4.7	23
36	An FPGA-based frequency response analyzer for multisine and stepped sine measurements on stationary and time-varying impedance. Measurement Science and Technology, 2014, 25, 015501.	2.6	20

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37	In vitro analysis of various cell lines responses to electroporative electric pulses by means of electrical impedance spectroscopy. <i>Biosensors and Bioelectronics</i> , 2018, 117, 207-216.	10.1	18
38	Real-time and on-line monitoring of morphological cell parameters using electrical impedance spectroscopy measurements. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 1755-1762.	3.2	17
39	Improvement of a Front End for Bioimpedance Spectroscopy. <i>Annals of the New York Academy of Sciences</i> , 1999, 873, 306-312.	3.8	14
40	Changes in myocardial electrical impedance in human heart graft rejection. <i>European Journal of Heart Failure</i> , 2008, 10, 594-600.	7.1	14
41	Design and Implementation of a Microelectrode Assembly for Use on Noncontact In Situ Electroporation of Adherent Cells. <i>Journal of Membrane Biology</i> , 2012, 245, 617-624.	2.1	14
42	A new spiral microelectrode assembly for electroporation and impedance measurements of adherent cell monolayers. <i>Biomedical Microdevices</i> , 2014, 16, 575-590.	2.8	12
43	Recognition of Fibrotic Infarct Density by the Pattern of Local Systolic-Diastolic Myocardial Electrical Impedance. <i>Frontiers in Physiology</i> , 2016, 7, 389.	2.8	12
44	A simplified implementation of the stationary liquid mass balance method for on-line OUR monitoring in animal cell cultures. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 1757-1766.	3.2	11
45	Early detection of acute transmural myocardial ischemia by the phasic systolic-diastolic changes of local tissue electrical impedance. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H436-H443.	3.2	10
46	Modular Workbench for In-Situ and Remote Laboratories. <i>Conference Record - IEEE Instrumentation and Measurement Technology Conference</i> , 2007, , .	0.0	8
47	Performance of an implantable impedance spectroscopy monitor using ZigBee. <i>Journal of Physics: Conference Series</i> , 2010, 224, 012163.	0.4	8
48	Influence of the multisine excitation amplitude design for biomedical applications using Impedance Spectroscopy. , 2011, 2011, 3975-8.		8
49	Minimal implementation of an AFE4300-based spectrometer for electrical impedance spectroscopy measurements. <i>Journal of Physics: Conference Series</i> , 2013, 434, 012014.	0.4	8
50	Developing innovation competences in engineering students: a comparison of two approaches. <i>European Journal of Engineering Education</i> , 2022, 47, 353-372.	2.3	8
51	Multiple automated minibioreactor system for multifunctional screening in biotechnology. , 2006, 2006, 632-5.		7
52	Structural changes of <i>Arthrospira</i> sp. after low energy sonication treatment for microalgae harvesting: Elucidating key parameters to detect the rupture of gas vesicles. <i>Bioresource Technology</i> , 2017, 223, 98-104.	9.6	7
53	Robustness of focused and global impedance estimates of bladder volumes against uncertainty of urine conductivity. <i>Biomedical Physics and Engineering Express</i> , 2020, 6, 045008.	1.2	7
54	Influence of electrical stimulation on 3D-cultures of Adipose Tissue derived progenitor cells (ATDPCs) behavior. , 2012, 2012, 5658-61.		6

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55	Ventilation and Heart Rate Monitoring in Drivers using a Contactless Electrical Bioimpedance System. Journal of Physics: Conference Series, 2013, 434, 012047.	0.4	6
56	Fast Electrical Impedance Spectroscopy for Moving Tissue Characterization Using Bilateral QuasiLogarithmic Multisine Bursts Signals. IFMBE Proceedings, 2009, , 1084-1087.	0.3	5
57	Multifrequency simultaneous bioimpedance measurements using multitone burst signals for dynamic tissue characterization. Journal of Physics: Conference Series, 2010, 224, 012004.	0.4	5
58	Development of a simple disposable six minibioreactor system for suspension mammalian cell culture. Process Biochemistry, 2012, 47, 597-605.	3.7	5
59	A pilot spectroscopy study on time-varying bioimpedance during electrically-induced muscle contraction. , 2014, 2014, 3739-42.		5
60	In-cycle myocardium tissue electrical impedance monitoring using broadband impedance spectroscopy. , 2011, 2011, 2518-21.		4
61	Automatic system for electroporation of adherent cells growing in standard multi-well plates. , 2012, 2012, 2571-4.		4
62	Towards on line monitoring the evolution of the myocardium infarction scar with an implantable electrical impedance spectrum monitoring system. , 2012, 2012, 3223-6.		4
63	Minimally Invasive Lung Tissue Differentiation Using Electrical Impedance Spectroscopy: A Comparison of the 3- and 4-Electrode Methods. IEEE Access, 2022, 10, 7354-7367.	4.2	4
64	Algorithms for parametric images in MEIT systems. Physiological Measurement, 2000, 21, 35-43.	2.1	3
65	On-line measurement of urea in blood using optical spectroscopy in the visible range; Validation of the cell shrinkage hypothesis. , 0, , .		3
66	Performance of the load-in-the-loop single Op-Amp voltage Controlled current source from the Op-Amp Parameters. Journal of Physics: Conference Series, 2010, 224, 012008.	0.4	3
67	Learning to Conceive, Design, Implement and Operate Circuits and Systems. , 2011, , .		3
68	Interoperability platform for virtual and remote laboratories. , 2012, , .		3
69	Textile electrode characterization: dependencies in the skin-clothing-electrode interface. Journal of Physics: Conference Series, 2013, 434, 012024.	0.4	3
70	Development and impedimetric evaluation of a magnetic interdigitated microelectrode. Sensors and Actuators B: Chemical, 2014, 203, 444-451.	7.8	3
71	Robotic tactile recognition of pseudo-random encoded objects. , 0, , .		2
72	Implantable bioimpedance monitor using ZigBee. , 2009, 2009, 4868-71.		2

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73	A remote laboratory to promote the interaction between University and Secondary Education. , 2010, , .		2
74	GILABVIR: Virtual Laboratories and Remote Laboratories in engineering: A teaching innovation group of interest. , 2010, , .		2
75	Minimally invasive in vivo human lung tissue bioimpedance measurements during the bronchoscopy procedure. , 2012, 2012, 130-3.		2
76	Correction to "Error analysis and reduction for a simple sensor-microcontroller interface". IEEE Transactions on Instrumentation and Measurement, 2003, 52, 990-990.	4.7	1
77	Multiparametric measurement system for detection of cardiac graft rejection. , 0, , .		1
78	iLabRS: A remote laboratory for science & technology in secondary education. , 2012, , .		1
79	Towards an accurate bioimpedance identification. Journal of Physics: Conference Series, 2013, 434, 012002.	0.4	1
80	Myocardial contractility assessed by dynamic electrical impedance measurements during dobutamine stress. , 2015, 2015, 6548-51.		1
81	Control of Biological Life Support Systems: Development of Non-Invasive, Direct Monitoring of Free and Immobilised Biomass Concentration in a Bioreactor. , 0, , .		0
82	Electrical Impedance Spectroscopy for On-Line Estimation of Viable Biomass. , 0, , .		0
83	On-line Monitoring of Microbial Cell Concentration in Fermentation Production of CAVA. , 2003, , .		0
84	Experimental method of mis measurement of an electrolytic cell with a passive wireless sensor. , 2008, , .		0
85	Continuous oxygen consumption estimation method for animal cell bioreactors based on a low-cost control of the medium dissolved oxygen concentration. IFMBE Proceedings, 2009, , 2190-2194.	0.3	0
86	Gene Transfer to Adherent Cells by in situ Electroporation with a Spiral Microelectrode Assembly. IFMBE Proceedings, 2014, , 900-903.	0.3	0