Marcio Souza

List of Publications by Year
in descending order

63 papers	827 citations	567281 15 h-index	526287 27 g-index
65 all docs	65 docs citations	65 times ranked	3056 citing authors

#	Article	IF	Citations
1	A bioimpedance spectroscopy technique to monitor bioprocess involving complex growth micro-organisms. AIP Advances, 2021, 11, 065032.	1.3	1
2	A novel model to simulate venous occlusion plethysmography data and to estimate arterial and venous parameters. Research on Biomedical Engineering, 2020, 36, 463-473.	2.2	1
3	Invasive electrical impedance myography at different levels of contraction of gastrocnemius muscle of rat. Review of Scientific Instruments, 2020, 91, 084103.	1.3	5
4	Behavior of Electrical Resistance in Gastrocnemius Muscle of Rats During Contractions with Different Intensities. IFMBE Proceedings, 2019, , 879-883.	0.3	0
5	Tissue Engineering Instrumentation Based on Electrical Impedance Measurements. , 2018, , 87-100.		0
6	Adults with initial metabolic syndrome have altered muscle deoxygenation during incremental exercise. Obesity, 2017, 25, 424-431.	3.0	4
7	Lactate threshold by muscle electrical impedance in professional rowers. Review of Scientific Instruments, 2017, 88, 045105.	1.3	5
8	Time-scaling based sliding mode control for Neuromuscular Electrical Stimulation under uncertain relative degrees. Medical Engineering and Physics, 2017, 44, 53-62.	1.7	18
9	Is the Frequency in Somatosensory Electrical Stimulation theKeyParameter in Modulating the Corticospinal Excitability of Healthy Volunteers and Stroke Patients with Spasticity?. Neural Plasticity, 2016, 2016, 1-11.	2.2	10
10	Detection of questionable occlusal carious lesions using an electrical bioimpedance method with fractional electrical model. Review of Scientific Instruments, 2016, 87, 084305.	1.3	5
11	Does acute exposure to aldehydes impair pulmonary function and structure?. Respiratory Physiology and Neurobiology, 2016, 229, 34-42.	1.6	1
12	An Alternative Electrical Impedance Myography Technique for Assessment of Local Muscular Fatigue. IFMBE Proceedings, 2016, , 24-27.	0.3	1
13	Waveform Similarity Analysis: A Simple Template Comparing Approach for Detecting and Quantifying Noisy Evoked Compound Action Potentials. PLoS ONE, 2015, 10, e0136992.	2.5	3
14	Inverse Kinematics of Push-Up Exercise Using Joint Coordinate System. Journal of Medical Imaging and Health Informatics, 2014, 4, 83-91.	0.3	2
15	Behaviour of the electrical impedance myography in isometric contraction of biceps brachii at different elbow joint angles. Journal of Physics: Conference Series, 2012, 407, 012017.	0.4	0
16	Effects of Intense Physical Activity with Free Water Replacement on Bioimpedance Parameters and Body Fluid Estimates. Journal of Physics: Conference Series, 2012, 407, 012002.	0.4	0
17	Iterative optimization algorithm - An alternative clustering tool for biological analysis using flow cytometry data. , 2012, , .		1
18	Noninvasive pressure pulse waveform analysis of flow-mediated vasodilation evoked by post-occlusive reactive hyperemia maneuver. Biomedical Signal Processing and Control, 2012, 7, 616-621.	5.7	8

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19	Noise measurement in NICUs and incubators with newborns: a systematic literature review. Revista Latino-Americana De Enfermagem, 2011, 19, 212-221.	1.0	15
20	Model for post-occlusive reactive hyperemia as measured noninvasively with pressure pulse waveform. Biomedical Signal Processing and Control, 2011, 6, 410-413.	5.7	4
21	Knee bioelectric impedance assessment in healthy/with osteoarthritis subjects. Physiological Measurement, 2010, 31, 207-219.	2.1	23
22	An alternative approach in muscle fatigue evaluation from the surface EMG signal. , 2010, 2010, 2419-22.		5
23	A fractional electrical impedance model in detection of occlusal non-cavitated carious. , 2010, 2010, 6551-4.		3
24	Intra- and inter-tester reproducibility of venous occlusion plethysmography: comparison between a manual and a semi-automatic method of blood flow analysis. Physiological Measurement, 2009, 30, 1267-1279.	2.1	14
25	Military parachuting injuries in Brazil. Injury, 2009, 40, 897-900.	1.7	15
26	Three-section transmission-line arterial model for noninvasive assessment of vascular remodeling in primary hypertension. Biomedical Signal Processing and Control, 2009, 4, 2-6.	5.7	14
27	Comparison of two bioimpedance spectroscopy techniques in the assessment of body fluid volumes. , 2009, 2009, 853-6.		2
28	A novel electromyographic signal simulator for muscle contraction studies. Computer Methods and Programs in Biomedicine, 2008, 89, 269-274.	4.7	9
29	Assessment of characteristic of the vasomotor control dynamics based on plethysmographic blood flow measurement. Physiological Measurement, 2008, 29, 205-215.	2.1	4
30	Evaluation of Arm Dominance by Using the Mechanomyographic Signal. Journal of Motor Behavior, 2008, 40, 83-89.	0.9	1
31	Objective assessment of knee osteroarthritis in parachuters by bioimpedance spectroscopy. , 2008, 2008, 5620-3.		5
32	A Programmable System of Functional Electrical Stimulation (FES). Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2234-7.	0.5	11
33	Longitudinal Study of the Fundamental Frequency of Hunger Cries Along the First 6 Months of Healthy Babies. Journal of Voice, 2007, 21, 551-559.	1.5	26
34	Estimation of the Lactate Threshold Using Bioelectrical Impedance Spectroscopy: A New Noninvasive Method. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3052-5.	0.5	2
35	Electrical impedance model for evaluation of skin irritation in rabbits and humans. Skin Research and Technology, 2007, 13, 259-267.	1.6	21
36	Simplified Distributed-Parametermodel of Brachial-Radial Arteries for Noninvasive Determination of Mechanical Characteristics of Vessel. , 2006, 2006, 1814-7.		0

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37	Assessment of Acute Skin Irritation in Rabbits Using Electrical Impedance Model. , 2006, 2006, 1665-8.		0
38	Bioelectrical impedance spectroscopy for the assessment of body fluid volumes of term neonates. Brazilian Journal of Medical and Biological Research, 2004, 37, 1595-1606.	1.5	15
39	Determination of radial artery compliance can increase the diagnostic power of pulse wave velocity measurement. Physiological Measurement, 2004, 25, 37-50.	2.1	19
40	A method for bio-electrical impedance analysis based on a step-voltage response. Physiological Measurement, 2000, 21, 395-408.	2.1	36
41	Neural second-level trigger system based on calorimetry. Computer Physics Communications, 1996, 95, 143-157.	7.5	10
42	Test results of an electromagnetic calorimeter with 0.5 mm scintillating fibers readout. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 337, 314-325.	1.6	12
43	Test results of a fully projective lead/scintillating-fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 337, 326-341.	1.6	13
44	A fast signal adder for applications with calorimeters. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 350, 300-304.	1.6	2
45	Application of the artificial neural network approach to the recognition of specific patterns in Auger electron spectroscopy. Surface and Interface Analysis, 1993, 20, 1047-1050.	1.8	13
46	An artificial neural network applied to the identification of MÃ¶ssbauer spectra of corrosion products. Nuclear Instruments & Methods in Physics Research B, 1993, 73, 95-100.	1.4	15
47	The performance of a lead/scintillating-fiber calorimeter at LHC/SSC compatible gate widths. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 314, 431-449.	1.6	16
48	A drawback of the center of gravity readout method: the U-effect observed in positron resolution study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 314, 70-73.	1.6	0
49	A simple method for cable compensation with fast pulse transmission applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 314, 191-198.	1.6	1
50	Detection of muons with a lead/scintillating-fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 320, 128-143.	1.6	48
51	Lateral shower profiles in a lead/scintillating fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 316, 184-201.	1.6	44
52	Electron, pion and multiparticle detection with a lead/scintillating-fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 308, 481-508.	1.6	97
53	On muon production and other leakage aspects of pion absorption in a lead/scintillating-fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 309, 143-159.	1.6	18
54	Electron-pion discrimination with a scintillating fiber calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 302, 36-46.	1.6	45

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55	Localizing particles showering in a Spaghetti Calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 305, 55-70.	1.6	46
56	Results of prototype studies for a spaghetti calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 294, 193-210.	1.6	108
57	Distortionless bidimensional localization on a resistive plane: A pure hardware way. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1987, 261, 500-518.	1.6	2
58	Semi-automatic system developed to quantify arterial baroreflex sensitivity. , 0, , .		0
59	Detection of first and second cardiac sounds based on time frequency analysis. , 0, , .		12
60	Comparison of segmental arterial compliance determined with three and four element Windkessel models. , 0, , .		4
61	Assessment of knee osteoarthritis by bioelectrical impedance. , 0, , .		11
62	Stimulus artifact cancellation in click evoked otoacoustic emissions using linear prediction. , 0, , .		0
63	Results of an EIT prototype able to supply static images. , 0, , .		1