

# Rodrigo P B Costa-Felix

## List of Publications by Year in descending order

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Version: 2024-02-01

72  
papers

496  
citations

687363

13  
h-index

752698

20  
g-index

72  
all docs

72  
docs citations

72  
times ranked

488  
citing authors

#	ARTICLE	IF	CITATIONS
1	Identificação da demanda brasileira por ensaios acreditados para testes inteligentes aplicados à saúde por meio da análise patentária. <i>Sistemas &amp; Gestão</i> , 2022, 16, .	0.1	0
2	Post-market evaluation of medical electrical equipment. <i>Research on Biomedical Engineering</i> , 2021, 37, 105-109.	2.2	3
3	Assessment of ultrasonic properties of an agarose phantom at the frequency range 2.25 MHz to 10 MHz. <i>Journal of Physics: Conference Series</i> , 2021, 1826, 012005.	0.4	1
4	Feasibility of Reference Material Certification for Speed of Sound and Attenuation Coefficient Based on Standard Tissue-Mimicking Material. <i>Ultrasound in Medicine and Biology</i> , 2021, 47, 1904-1919.	1.5	3
5	Ultrasound-assisted transesterification of soybean oil using low power and high frequency and no external heating source. <i>Ultrasonics Sonochemistry</i> , 2021, 78, 105709.	8.2	14
6	Metrological assessment of image quality in ultrasonic medical diagnostic equipment. <i>Research on Biomedical Engineering</i> , 2020, 36, 379-397.	2.2	2
7	Metrological Approach for Characterizing Ultrasonic Properties of Soft Tissue-Mimicking Material. <i>IFMBE Proceedings</i> , 2020, , 1315-1328.	0.3	1
8	Ultrasonic parameter measurement as a means of assessing the quality of biodiesel production. <i>Fuel</i> , 2019, 241, 155-163.	6.4	25
9	Measuring uncertainty of ultrasonic longitudinal phase velocity estimation using different time-delay estimation methods based on cross-correlation: Computational simulation and experiments. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 122, 45-56.	5.0	35
10	An ultrasonic method to appraise diesel and biodiesel blends. <i>Fuel</i> , 2018, 227, 150-153.	6.4	11
11	Using ultrasonic velocity for monitoring and analysing biodiesel production. <i>Fuel</i> , 2018, 226, 389-399.	6.4	17
12	Nonlinear frequency modulated excitation signal and modified compressing filter for improved range resolution and side lobe level of ultrasound echoes. <i>Applied Acoustics</i> , 2018, 130, 238-246.	3.3	8
13	Relating speed of sound and echo amplitude with biodiesel manufacture. <i>Chemical Engineering Research and Design</i> , 2018, 136, 825-833.	5.6	4
14	Non-invasive Estimation of Temperature during Physiotherapeutic Ultrasound Application Using the Average Gray-Level Content of B-Mode Images: A Metrological Approach. <i>Ultrasound in Medicine and Biology</i> , 2017, 43, 1938-1952.	1.5	10
15	Ultrasonic attenuation and sound velocity assessment for mixtures of gasoline and organic compounds. <i>Fuel</i> , 2017, 191, 170-175.	6.4	16
16	Metrological Validation of a Measurement Procedure for the Characterization of a Biological Ultrasound Tissue-Mimicking Material. <i>Ultrasound in Medicine and Biology</i> , 2017, 43, 323-331.	1.5	17
17	Aspectos Metroológicos da Técnica Tempo de Voo da Onda Difratada (ToFD) para Utilização em Ensaios Não Destrutivos (ENDs) por Ultrassom. <i>Soldagem E Inspecao</i> , 2016, 21, 406-416.	0.6	1
18	Review of the Technical Metrological Regulation for flow computers and volume converters. <i>Journal of Physics: Conference Series</i> , 2016, 733, 012050.	0.4	0

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19	Metrology applied to ultrasound characterization of trabecular bones using the AIB parameter. Journal of Physics: Conference Series, 2016, 733, 012012.	0.4	0
20	Experimental findings on the underwater measurements uncertainty of speed of sound and the alignment system. Journal of Physics: Conference Series, 2016, 733, 012053.	0.4	0
21	Uncertainty evaluation of dead zone of diagnostic ultrasound equipment. Journal of Physics: Conference Series, 2016, 733, 012043.	0.4	2
22	Use of ultrasound to monitor physical properties of soybean oil. Journal of Physics: Conference Series, 2016, 733, 012042.	0.4	2
23	Standard operating procedure to prepare agar phantoms. Journal of Physics: Conference Series, 2016, 733, 012044.	0.4	19
24	Speed of sound as a function of temperature for ultrasonic propagation in soybean oil. Journal of Physics: Conference Series, 2016, 733, 012040.	0.4	14
25	On the importance of measurement system calibration for underwater passive monitoring. Journal of Physics: Conference Series, 2016, 733, 012052.	0.4	0
26	Monte Carlo uncertainty assessment of ultrasonic beam parameters from immersion transducers used to non-destructive testing. Ultrasonics, 2016, 69, 144-151.	3.9	16
27	Metrological evaluation of a flaw detector used in non-destructive testing by ultrasound. Journal of Physics: Conference Series, 2016, 733, 012051.	0.4	0
28	Measurement Precision Under Repeatability Conditions of a Batch of Sound Power Assessment for Blenders in Reverberation Room. Archives of Acoustics, 2016, 41, 591-597.	0.8	2
29	Thermochromic Phantom and Measurement Protocol for Qualitative Analysis of Ultrasound Physiotherapy Systems. Ultrasound in Medicine and Biology, 2016, 42, 299-307.	1.5	5
30	Monitoring biodiesel reactions of soybean oil and sunflower oil using ultrasonic parameters. Journal of Physics: Conference Series, 2015, 575, 012001.	0.4	2
31	Hydro acoustic transducer's calibration by the reciprocity. Journal of Physics: Conference Series, 2015, 575, 012007.	0.4	0
32	VII Brazilian Congress on Metrology (Metrologia 2013). Journal of Physics: Conference Series, 2015, 575, 011001.	0.4	0
33	Uncertainty assessment in measurement of myotube thickness in cells culture treated with and without therapeutic ultrasound. Journal of Physics: Conference Series, 2015, 575, 012002.	0.4	0
34	Effects of the concentration of emulsion of oil-in-water on the propagation velocity and attenuation. Journal of Physics: Conference Series, 2015, 575, 012005.	0.4	0
35	Primary reciprocity-based method for calibration of hydrophone magnitude and phase sensitivity: Complete tests at frequencies from 1 to 7MHz. Ultrasonics, 2015, 58, 87-95.	3.9	9
36	Output bandwidth enhancement of a pulsed ultrasound system using a flat envelope and compensated frequency-modulated input signal: Theory and experimental applications. Measurement: Journal of the International Measurement Confederation, 2015, 69, 146-154.	5.0	14

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37	Uncertainty evaluation from non-invasive estimation of temperature variation using B-mode ultrasonic images from a plastic phantom. Measurement: Journal of the International Measurement Confederation, 2015, 69, 189-194.	5.0	7
38	Hydrophone's sensitivity calibration based on its complex transfer function. Journal of Physics: Conference Series, 2015, 575, 012004.	0.4	1
39	Comparing Ultrasound and Mechanical Steering in a Biodiesel Production Process. Physics Procedia, 2015, 70, 1066-1069.	1.2	12
40	Ultrasonic transverse velocity calibration of standard blocks for use in non-destructive testing. Journal of Physics: Conference Series, 2015, 575, 012006.	0.4	1
41	A Metrological Based Realization of Time-of-Flight Diffraction Technique. Physics Procedia, 2015, 70, 590-593.	1.2	3
42	DEVELOPMENT OF AN ULTRASONIC TECHNIQUE TO ASSESS OIL AND GREASE CONTENTS IN BIOFUEL WASTEWATER. Quimica Nova, 2015, , .	0.3	3
43	A reciprocity-based method to determine hydrophone complex sensitivity and tested at frequencies from 1 to 7 MHz. , 2014, , .		0
44	A methodology free of pyridine for measuring hydroxyl value in polymers and oils. Polymer Testing, 2014, 33, 16-20.	4.8	11
45	Ultrasound propagation velocity and acoustic attenuation on agarose phantoms' in three different manufacture techniques. , 2014, , .		2
46	Influence of subcutaneous fat in surface heating of ultrasonic diagnostic transducers. Ultrasonics, 2014, 54, 1476-1479.	3.9	13
47	Induction of Skeletal Muscle Differentiation In Vitro by Therapeutic Ultrasound. Ultrasound in Medicine and Biology, 2014, 40, 504-512.	1.5	23
48	Reciprocity calibration of hydroacoustic transducers using swept-sines (chirps). , 2013, , .		0
49	Reciprocity-based method for magnitude and phase calibration of hydrophone sensitivity. , 2013, , .		0
50	Estimation of ultrasonic beam parameters uncertainty from NDT immersion probes using Monte Carlo method. , 2012, , .		0
51	Nondestructive testing ultrasonic immersion probe assessment and uncertainty evaluation according to EN 12668-2:2010. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 2338-2346.	3.0	8
52	In-line ultrasonic monitoring of biodiesel production. , 2012, , .		0
53	Biofuel ethanol adulteration detection using an ultrasonic measurement method. Fuel, 2012, 91, 209-212.	6.4	42
54	Improved range resolution and side lobe level of ultrasound echoes using nonlinear frequency-modulated excitation signal and modified compressing filter. , 2011, , .		1

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55	The importance of expression of uncertainty of acoustical parameters of ultrasonic phantoms. Journal of Physics: Conference Series, 2011, 279, 012027.	0.4	1
56	Sensibility of hydrous ethanol adulteration detection using ultrasonic parameters validated in a metrological base. Journal of Physics: Conference Series, 2011, 279, 012028.	0.4	3
57	Biological response in vitro of skeletal muscle cells treated with different intensity continuous and pulsed ultrasound fields. Journal of Physics: Conference Series, 2011, 279, 012022.	0.4	1
58	Ultrasonic immersion probes characterization for use in nondestructive testing according to EN 12668-2:2001. Journal of Physics: Conference Series, 2011, 279, 012025.	0.4	0
59	A fully automated system for ultrasonic power measurement and simulation accordingly to IEC 61161:2006. Journal of Physics: Conference Series, 2011, 279, 012004.	0.4	1
60	Ultrasonic calibration and certification of V1 and V2 type reference standard blocks for use in Non-Destructive Testing. Journal of Physics: Conference Series, 2011, 279, 012029.	0.4	6
61	Effective radiating area and beam non-uniformity ratio of ultrasound transducers at 5 MHz, according to IEC 61689:2007. Ultrasonics, 2010, 50, 329-331.	3.9	2
62	Microwave activation of enzymatic catalysts for biodiesel production. Journal of Molecular Catalysis B: Enzymatic, 2010, 67, 117-121.	1.8	48
63	Metrological aspects on therapeutic ultrasound parameters: effective radiating area and non-uniformity ration. Physics Procedia, 2010, 3, 643-649.	1.2	1
64	Uncertainty assessment of effective radiating area and beam non-uniformity ratio of ultrasound transducers determined according to IEC 61689:2007. Metrologia, 2009, 46, 367-374.	1.2	15
65	Development of a reliable ultrasound power source for metrological applications. , 2008, , .		0
66	Type B uncertainty in sound power measurements using comparison method. Measurement: Journal of the International Measurement Confederation, 2006, 39, 169-175.	5.0	20
67	P2D-9 A Frequency-Compensated Coded-Excitation Pulse to Improve Axial Resolution of Ultrasonic System. , 2006, , .		1
68	P1G-9 Stepped Sine Versus Coded Pulse As Excitation Signals for Ultrasonic Transducer Calibration in a Non-Linear Propagation Field. , 2006, , .		1
69	Broadband ultrasonic attenuation measurements using coded sweep excitations. , 0, , .		2
70	Ultrasound as a Metrological Tool for Monitoring Transesterification Kinetics. , 0, , .		6
71	Ultrasound Methods for Biodiesel Production and Analysis. , 0, , .		6
72	Tempo de Voo da Onda Difrata (ToFD) Auxilia na Garantia da Qualidade da ProduçãŁo de PeÇas e Estruturas MecÃnics. Soldagem E Inspecao, 0, 24, .	0.6	2