Maria GraÃ§a Ruano

List of Publications by Year
in descending order

84 papers	774 citations	623188 14 h-index	580395 25 g-index
88 all docs	88 docs citations	88 times ranked	592 citing authors

#	Article	IF	Citations
1	Non-Intrusive Load Monitoring of Household Devices Using a Hybrid Deep Learning Model through Convex Hull-Based Data Selection. Energies, 2022, 15, 1215.	1.6	10
2	Recent Techniques Used in Home Energy Management Systems: A Review. Energies, 2022, 15, 2866.	1.6	19
3	Low frequency-based energy disaggregation using sliding windows and deep learning. E3S Web of Conferences, 2022, 351, 01020.	0.2	1
4	Short-Term Forecasting Photovoltaic Solar Power for Home Energy Management Systems. Inventions, 2021, 6, 12.	1.3	7
5	Heart rate variability analysis for the identification of the preictal interval in patients with drug-resistant epilepsy. Scientific Reports, 2021, 11, 5987.	1.6	20
6	Home Energy Management Systems with Branch-and-Bound Model-Based Predictive Control Techniques. Energies, 2021, 14, 5852.	1.6	8
7	Home Energy Management System in an Algarve Residence. First Results. Lecture Notes in Electrical Engineering, 2021, , 332-341.	0.3	6
8	Design of Ensemble Forecasting Models for Home Energy Management Systems. Energies, 2021, 14, 7664.	1.6	14
9	Forecasting Electricity Consumption in Residential Buildings for Home Energy Management Systems. Communications in Computer and Information Science, 2020, , 313-326.	0.4	8
10	Forecasting Electricity Demand in Households using MOGA-designed Artificial Neural Networks. IFAC-PapersOnLine, 2020, 53, 8225-8230.	0.5	4
11	Pulse Transition Time Method for Unobtrusive Blood Pressure Estimation. IFMBE Proceedings, 2020, , 1477-1484.	0.2	1
12	A CYTED Network: New Non-invasive Ways for an Early Diagnosis of Chronic and Degenerative Diseases: Diabetes and Cardiovascular. IFMBE Proceedings, 2020, , 1499-1505.	0.2	0
13	NILM Techniques for Intelligent Home Energy Management and Ambient Assisted Living: A Review. Energies, 2019, 12, 2203.	1.6	163
14	Preictal Time Assessment using Heart Rate Variability Features in Drug-resistant Epilepsy Patients. , 2019, 2019, 6776-6779.		3
15	GPR target detection using a neural network classifier designed by a multi-objective genetic algorithm. Applied Soft Computing Journal, 2019, 79, 310-325.	4.1	41
16	Classifier Design by a Multi-Objective Genetic Algorithm Approach for GPR Automatic Target Detection. IFAC-PapersOnLine, 2018, 51, 187-192.	0.5	16
17	Reliability of medical databases for the use of real word data and data mining techniques for cardiovascular diseases progression in diabetic patients. , 2018, , .		3
18	An intelligent support system for automatic detection of cerebral vascular accidents from brain CT images. Computer Methods and Programs in Biomedicine, 2017, 146, 109-123.	2.6	15

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19	Validation of a similarity measurement method for clustering cardiac signals. , 2017, , .		0
20	Intelligent non-invasive modeling of ultrasound-induced temperature in tissue phantoms. Biomedical Signal Processing and Control, 2017, 33, 141-150.	3.5	2
21	On the viability of ECG features for seizure anticipation on long-term data. , 2017, , .		0
22	Sensory system for the sleep disorders detection in the geriatric population. , 2017, , .		4
23	A method for sub-sample computation of time displacements between discrete signals based only on discrete correlation sequences. Biomedical Signal Processing and Control, 2017, 31, 560-568.	3.5	3
24	Comparison of different methods of measuring similarity in physiologic time series. IFAC-PapersOnLine, 2017, 50, 11005-11010.	0.5	32
25	Pattern discovery and similarity assessment for robust Heart Sound Segmentation. , 2017, 2017, 3517-3520.		1
26	Non-invasive modelling of ultrasound-induced temperature in tissues: a b-splines neural network solution**A. E. Ruano would like to acknowledge the support of the Portuguese Foundation for Science and Technology, through IDMEC, under LAETA, project UID/EMS/50022/2013.. IFAC-PapersOnLine, 2016, 49, 297-302.	0.5	1
27	A Radial Basis Function classifier for the automatic diagnosis of Cerebral Vascular Accidents. , 2016, , .		4
28	Enhancing medical evidence discovery through Interactive Pattern Recognition and process mining. , 2016, , .		0
29	Towards ultrasound hyperthermia safe treatments using computational intelligence techniques. , 2016, , .		0
30	Spatial monitoring of temperature estimation during ultrasound heating therapy. , 2015, , .		2
31	MOGA design for neural networks based system for automatic diagnosis of Cerebral Vascular Accidents. , 2015, , .		2
32	Computer-aided bone fracture identification based on ultrasound images. , 2015, , .		10
33	Seismic detection using support vector machines. Neurocomputing, 2014, 135, 273-283.	3.5	53
34	Estimating temperature in perfused tissue phantoms subject to ultrasound heating. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7523-7528.	0.4	1
35	Tissue temperature estimation with pulse-echo in blood flow presence. , 2013, , .		1
36	A software tool for intelligent CVA diagnosis by cerebral computerized tomography. , 2013, , .		4

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37	A Support Vector Machine Seismic Detector for Early-Warning Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 405-410.	0.4	2
38	On the Use of Artificial Neural Networks for Biomedical Applications. Advances in Intelligent Systems and Computing, 2013, , 433-451.	0.5	9
39	On-Line Operation of an Intelligent Seismic Detector. Advances in Intelligent Systems and Computing, 2013, , 531-542.	0.5	2
40	Enhancing time-frequency parameters estimation for Doppler Ultrasound blood-flow signals. , 2011, , .		2
41	Noise cancellation technique for Doppler ultrasound spectrogram enhancement. , 2011, , .		2
42	Solving practical issues of a portable Doppler Ultrasound system for blood flow assessment during coronary graft surgery. , 2011, , .		0
43	On the assessment of time-shift variations from backscattered ultrasound for large temperature changes in biological phantoms. Physics Procedia, 2010, 3, 701-706.	1.2	0
44	Evaluation of the influence of large temperature variations on the grey level content of B-mode images. Physics Procedia, 2010, 3, 415-419.	1.2	2
45	On the possibility of non-invasive multilayer temperature estimation using soft-computing methods. Ultrasonics, 2010, 50, 32-43.	2.1	21
46	Influence of temperature variations on the entropy and correlation of the Grey-Level Co-occurrence Matrix from B-Mode images. Ultrasonics, 2010, 50, 290-293.	2.1	24
47	A SCALABLE AND OPEN SOURCE LINEAR POSITIONING SYSTEM CONTROLLER. , 2009, , .		0
48	Neuro-genetic non-invasive temperature estimation: Intensity and spatial prediction. Artificial Intelligence in Medicine, 2008, 43, 127-139.	3.8	5
49	A Soft-Computing Methodology for Noninvasive Time-Spatial Temperature Estimation. IEEE Transactions on Biomedical Engineering, 2008, 55, 572-580.	2.5	28
50	NARX structures for non-invasive temperature estimation in non-homogeneous media. , 2007, , .		4
51	Neural networks assisted diagnosis of ischemic CVA's through CT scan. , 2007, , .		4
52	Non-invasive tissue temperature evaluation during application of therapeutic ultrasound: precise time-spatial non-linear modelling. , 2007, , 69-72.		3
53	Displacement-Frequency Doppler Blood Flow Estimation. , 2007, , .		2
54	Improving the Diagnosis of Ischemic CVA's through CT Scan with Neural Networks. , 2007, , .		1

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55	SINGLE BLACK-BOX MODELS FOR TWO-POINT NON-INVASIVE TEMPERATURE PREDICTION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 135-140.	0.4	2
56	Non-invasive temperature prediction of in vitro therapeutic ultrasound signals using neural networks. Medical and Biological Engineering and Computing, 2006, 44, 111-116.	1.6	13
57	Soft-Computing-Based Car Body Deformation and EES Determination for Car Crash Analysis Systems. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 2304-2312.	2.4	8
58	Time-variable blood flow averaged waveforms. International Journal of Systems Science, 2006, 37, 535-541.	3.7	3
59	TEMPERATURE MODELLING OF AN HOMOGENEOUS MEDIUM USING GENETICALLY SELECTED RBF(LIC). IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 119-124.	0.4	1
60	Multi-objective genetic algorithm applied to the structure selection of RBFNN temperature estimators. , 2005, , 506-509.		1
61	Adaptive System for Blood Flow Estimation. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 2220-2226.	2.4	0
62	NUMERICAL TECHNIQUES FOR MODELING DOPPLER ULTRASOUND SPECTRA SYSTEMS. Journal of Computational Acoustics, 2001, 09, 805-814.	1.0	1
63	Memory Management and Communication on Homogeneous and Heterogeneous Parallel systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 163-168.	0.4	0
64	Real-time implementation of a Doppler signal spectral estimator using sequential and parallel processing techniques. Microprocessors and Microsystems, 2000, 24, 153-167.	1.8	18
65	High performance parallel-DSP computing in model-based spectral estimation. Microprocessors and Microsystems, 1999, 23, 337-344.	1.8	4
66	High-performance computing for real-time spectral estimation. Control Engineering Practice, 1999, 7, 679-686.	3.2	8
67	Configurable Processing for Real-Time Spectral Estimation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 179-184.	0.4	2
68	High-Performance Real-Time Implementation of a Spectral Estimator. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 185-189.	0.4	0
69	Comparative Study of Different Doppler Spectrum Estimator Implementations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 281-286.	0.4	0
70	Nonstationarity broadening reduction in pulsed Doppler spectrum measurements using time-frequency estimators. IEEE Transactions on Biomedical Engineering, 1996, 43, 1176-1186.	2.5	57
71	Cost/benefit criterion for selection of pulsed Doppler ultrasound spectral mean frequency and bandwidth estimators. IEEE Transactions on Biomedical Engineering, 1993, 40, 1338-1341.	2.5	27
72	Alternative parallel implementations of an AR-modified covariance spectral estimator for diagnostic ultrasonic blood flow studies. Parallel Computing, 1993, 19, 463-476.	1.3	16

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73	Cost/benefit selection of spectral estimators for use with ultrasonic Doppler blood flow instruments. , 1992, , .		10
74	Parallel implementation of a model-based spectral estimator for Doppler blood flow instrumentation. , 0, , .		2
75	Doppler bandwidth and mean frequency from time-frequency estimators. , 0, , .		2
76	Doppler time-frequency estimators: cost/benefit analysis. , 0, , .		0
77	Parallel implementation of a Choi-Williams TFD for Doppler signal analysis. , 0, , .		1
78	Neural network classification of cerebral embolic signals. , 0, , .		0
79	A framework for blood flow analysis and research. , 0, , .		2
80	Soft computing based car body deformation and EES determination for car crash analysis systems. , 0, , .		4
81	Corner detection in digital images using fuzzy reasoning. , 0, , .		7
82	Anytime fourier transformation. , 0, , .		4
83	Time, time-frequency and displacement-frequency analysis of embolic signals. , 0, , .		1
84	"Analytic" approximation of doppler ultrasound blood flow signals. , 0, , .		1