Janusz Wrobel

List of Publications by Year
in descending order

59 papers	831 citations	516710 16 h-index	526287 27 g-index
61 all docs	61 docs citations	61 times ranked	558 citing authors

#	Article	IF	Citations
1	Reconstruction of True Fetal Heart Rate Signals Obtained via Ultrasound Bedside Monitor in Relation to Fetal Electrocardiography. Advances in Intelligent Systems and Computing, 2021, , 351-360.	0.6	0
2	Coping with limitations of fetal monitoring instrumentation to improve heart rhythm variability assessment. Biocybernetics and Biomedical Engineering, 2020, 40, 388-403.	5.9	4
3	New Method for Beat-to-Beat Fetal Heart Rate Measurement Using Doppler Ultrasound Signal. Sensors, 2020, 20, 4079.	3.8	5
4	Fetal electrocardiograms, direct and abdominal with reference heartbeat annotations. Scientific Data, 2020, 7, 200.	5.3	40
5	Detection of Atrial Fibrillation Episodes in Long-Term Heart Rhythm Signals Using a Support Vector Machine. Sensors, 2020, 20, 765.	3.8	45
6	Recognition of Atrial Fibrilation Episodes in Heart Rate Variability Signals Using a Machine Learning Approach. , 2019, , .		2
7	New Possibilities for Fetal Monitoring Using Unobtrusive Abdominal Electrocardiography. , 2019, , .		2
8	Improving the Automated Detection of Silent AF Episodes Based on HR Variability Measures. Advances in Intelligent Systems and Computing, 2019, , 131-140.	0.6	0
9	Optimizing the Automated Detection of Atrial Fibrillation Episodes in Long-term Recording Instrumentation. , 2018, , .		3
10	Control and signal processing software embedded in smart wristband monitor of silent atrial fibrillation. , 2017, , .		4
11	Atrial fibrillation episodes detection based on classification of heart rate derived features. , 2017, , .		18
12	OWA aggregation operator in robust filtering. , 2017, , .		3
13	Is Abdominal Fetal Electrocardiography an Alternative to Doppler Ultrasound for FHR Variability Evaluation?. Frontiers in Physiology, 2017, 8, 305.	2.8	40
14	Hardware design issues and functional requirements for smart wristband monitor of silent atrial fibrillation. , 2017, , .		3
15	Early predicting a risk of preterm labour by analysis of antepartum electrohysterograhic signals. Biocybernetics and Biomedical Engineering, 2016, 36, 574-583.	5.9	35
16	Detection of aorta anatomical structures characterized by various levels of pixel intensity. , 2016, , .		1
17	Evaluating the fetal heart rate baseline estimation algorithms by their influence on detection of clinically important patterns. Biocybernetics and Biomedical Engineering, 2016, 36, 562-573.	5.9	34
18	Design and interfacing aspects of the medical instrumentation for modern hospital system for pregnancy and labour monitoring. , 2016, , .		3

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19	New filtering approach for improving quality of the ECG signal recorded during a non-invasive electrical heart stimulation. , 2016, , .		0
20	Sequential separation of twin pregnancy electrocardiograms. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2016, 64, 91-101.	0.8	4
21	Selected design issues of the medical cyber-physical system for telemonitoring pregnancy at home. Microprocessors and Microsystems, 2016, 46, 35-43.	2.8	34
22	Automated detection of uterine contractions in tocography signals â€“ Comparison of algorithms. Biocybernetics and Biomedical Engineering, 2016, 36, 610-618.	5.9	13
23	Towards a medical cyber-physical system for home telecare of high-risk pregnancy. IFAC-PapersOnLine, 2015, 48, 466-473.	0.9	7
24	Medical Cyber-Physical System for Home Telecare of High-Risk Pregnancy: Design Challenges and Requirements. Journal of Medical Imaging and Health Informatics, 2015, 5, 1295-1301.	0.3	26
25	Evaluation of the Robustness of Fetal Heart Rate Variability Measures to Low Signal Quality. Journal of Medical Imaging and Health Informatics, 2015, 5, 1311-1318.	0.3	21
26	Efficient Evaluation of Fetal Wellbeing During Pregnancy Using Methods Based on Statistical Learning Principles. Journal of Medical Imaging and Health Informatics, 2015, 5, 1327-1336.	0.3	7
27	Analysis of Uterine Contractile Wave Propagation in Electrohysterogram for Assessing the Risk of Preterm Birth. Journal of Medical Imaging and Health Informatics, 2015, 5, 1287-1294.	0.3	14
28	Pregnancy Telemonitoring with Smart Control of Algorithms for Signal Analysis. Journal of Medical Imaging and Health Informatics, 2015, 5, 1302-1310.	0.3	21
29	Recognition of Fetal Movementsâ€“Automated Detection from Doppler Ultrasound Signals Compared to Maternal Perception. Journal of Medical Imaging and Health Informatics, 2015, 5, 1319-1326.	0.3	4
30	Telemonitoring of pregnant women at home — Biosignals acquisition and measurement. , 2015, , .		5
31	XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013. IFMBE Proceedings, 2014, , .	0.3	11
32	Quality Based Adaptation of Signal Analysis Software in Pregnancy Home Care System. IFMBE Proceedings, 2014, , 559-562.	0.3	1
33	Fuzzy System for Retrospective Evaluation of the Fetal State. IFMBE Proceedings, 2014, , 754-757.	0.3	0
34	Improving fetal heart rate signal interpretation by application of myriad filtering. Biocybernetics and Biomedical Engineering, 2013, 33, 211-221.	5.9	40
35	Application of fuzzy inference systems for classification of fetal heart rate tracings in relation to neonatal outcome. Ginekologia Polska, 2013, 84, 38-43.	0.7	8
36	Analysis of FHR Variability Extracted from Mechanical and Electrical Fetal Heart Activity Signals. IFMBE Proceedings, 2013, , 1074-1077.	0.3	0

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37	Robust extraction of fuzzy rules with artificial neural network based on fuzzy inference system. International Journal of Intelligent Information and Database Systems, 2012, 6, 77.	0.3	3
38	A new method of saccadic eye movement detection for optokinetic nystagmus analysis. , 2012, 2012, 3464-7.		10
39	Two-Step Analysis of the Fetal Heart Rate Signal as a Predictor of Distress. Lecture Notes in Computer Science, 2012, , 431-438.	1.3	2
40	A novel technique for fetal heart rate estimation from Doppler ultrasound signal. BioMedical Engineering OnLine, 2011, 10, 92.	2.7	62
41	Wireless Fetal Monitoring at Home with On-Line Signal Analysis. IFMBE Proceedings, 2011, , 906-909.	0.3	0
42	Predicting the Risk of Low-Fetal Birth Weight From Cardiotocographic Signals Using ANBLIR System With Deterministic Annealing and ${m varepsilon}$ -Insensitive Learning. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 1062-1074.	3.2	38
43	Robust Prediction with ANNBFIS System. Lecture Notes in Computer Science, 2010, , 185-194.	1.3	1
44	Ensuring the Real Time Signal Transmission Using GSM/Internet Technology for Remote Fetal Monitoring. Advances in Soft Computing, 2008, , 291-298.	0.4	2
45	Coping with Limitation of Bedside Measurement Instrumentation for Reliable Assessment of Fetal Heart Rate Variability. Advances in Soft Computing, 2008, , 307-314.	0.4	2
46	Prediction of Newborn Sex with Neural Networks Approach to Fetal Cardiotocograms Classification. Advances in Soft Computing, 2008, , 299-306.	0.4	0
47	Some Practical Remarks on Neural Networks Approach to Fetal Cardiotocograms Classification. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5170-3.	0.5	19
48	The Prediction of Fetal Outcome by Applying Neural Network for Evaluation of CTG Records. Advances in Intelligent and Soft Computing, 2007, , 532-541.	0.2	9
49	Automated Classification of Deceleration Patterns in Fetal Heart Rate Signal using Neural Networks. IFMBE Proceedings, 2007, , 5-8.	0.3	1
50	Centralised fetal monitoring system with hardware-based data flow control. , 2006, , 18.		19
51	Simultaneous monitoring of mechanical and electrical properties of pregnant uterus. , 2006, , 10.		1
52	The influence of coincidence of fetal and maternal QRS complexes on fetal heart rate reliability. Medical and Biological Engineering and Computing, 2006, 44, 393-403.	2.8	42
53	Comparison of Doppler ultrasound and direct electrocardiography acquisition techniques for quantification of fetal heart rate variability. IEEE Transactions on Biomedical Engineering, 2006, 53, 855-864.	4.2	70
54	Quantitative analysis of contraction patterns in electrical activity signal of pregnant uterus as an alternative to mechanical approach. Physiological Measurement, 2005, 26, 753-767.	2.1	81

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55	Instrumentation for Fetal Cardiac Performance Analysis During the Antepartum Period. , 2005, 2005, 6675-8.		4
56	Data Management System for Computer Aided Biophysical Monitoring. , 2005, 2005, 4712-5.		1
57	Baseline and Acceleration Episodes - Clinically Significant Nonstationarities in FHR Signal: Part I. Coefficients of Inconsistency. Advances in Soft Computing, 2005, , 527-534.	0.4	1
58	Analysis of nonstationarities in fetal heart rate signal: inconsistency measures of baselines using acceleration/deceleration patterns. , 2003, , .		5
59	Fast prototyping of an interface between new bedside device and computerized fetal monitoring system. , 0, , .		0