

# Janusz Wrobel

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Quantitative analysis of contraction patterns in electrical activity signal of pregnant uterus as an alternative to mechanical approach. <i>Physiological Measurement</i> , 2005, 26, 753-767.	2.1	81
2	Comparison of Doppler ultrasound and direct electrocardiography acquisition techniques for quantification of fetal heart rate variability. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 855-864.	4.2	70
3	A novel technique for fetal heart rate estimation from Doppler ultrasound signal. <i>BioMedical Engineering OnLine</i> , 2011, 10, 92.	2.7	62
4	Detection of Atrial Fibrillation Episodes in Long-Term Heart Rhythm Signals Using a Support Vector Machine. <i>Sensors</i> , 2020, 20, 765.	3.8	45
5	The influence of coincidence of fetal and maternal QRS complexes on fetal heart rate reliability. <i>Medical and Biological Engineering and Computing</i> , 2006, 44, 393-403.	2.8	42
6	Improving fetal heart rate signal interpretation by application of myriad filtering. <i>Biocybernetics and Biomedical Engineering</i> , 2013, 33, 211-221.	5.9	40
7	Is Abdominal Fetal Electrocardiography an Alternative to Doppler Ultrasound for FHR Variability Evaluation?. <i>Frontiers in Physiology</i> , 2017, 8, 305.	2.8	40
8	Fetal electrocardiograms, direct and abdominal with reference heartbeat annotations. <i>Scientific Data</i> , 2020, 7, 200.	5.3	40
9	Predicting the Risk of Low-Fetal Birth Weight From Cardiotocographic Signals Using ANBLIR System With Deterministic Annealing and $\epsilon$ -Insensitive Learning. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2010, 14, 1062-1074.	3.2	38
10	Early predicting a risk of preterm labour by analysis of antepartum electrohysterographic signals. <i>Biocybernetics and Biomedical Engineering</i> , 2016, 36, 574-583.	5.9	35
11	Evaluating the fetal heart rate baseline estimation algorithms by their influence on detection of clinically important patterns. <i>Biocybernetics and Biomedical Engineering</i> , 2016, 36, 562-573.	5.9	34
12	Selected design issues of the medical cyber-physical system for telemonitoring pregnancy at home. <i>Microprocessors and Microsystems</i> , 2016, 46, 35-43.	2.8	34
13	Medical Cyber-Physical System for Home Telecare of High-Risk Pregnancy: Design Challenges and Requirements. <i>Journal of Medical Imaging and Health Informatics</i> , 2015, 5, 1295-1301.	0.3	26
14	Evaluation of the Robustness of Fetal Heart Rate Variability Measures to Low Signal Quality. <i>Journal of Medical Imaging and Health Informatics</i> , 2015, 5, 1311-1318.	0.3	21
15	Pregnancy Telemonitoring with Smart Control of Algorithms for Signal Analysis. <i>Journal of Medical Imaging and Health Informatics</i> , 2015, 5, 1302-1310.	0.3	21
16	Centralised fetal monitoring system with hardware-based data flow control. , 2006, , 18.		19
17	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
18	Atrial fibrillation episodes detection based on classification of heart rate derived features. , 2017, , .		18

#	ARTICLE	IF	CITATIONS
19	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
20	Automated detection of uterine contractions in tocography signals – Comparison of algorithms. Biocybernetics and Biomedical Engineering, 2016, 36, 610-618.	5.9	13
21	XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013. IFMBE Proceedings, 2014, , .	0.3	11
22	A new method of saccadic eye movement detection for optokinetic nystagmus analysis. , 2012, 2012, 3464-7.		10
23	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
24	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
25	Towards a medical cyber-physical system for home telecare of high-risk pregnancy. IFAC-PapersOnLine, 2015, 48, 466-473.	0.9	7
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 nonstationarities in fetal heart rate signal: inconsistency measures of baselines using acceleration/deceleration patterns. , 2003, , .		5
28	Telemonitoring of pregnant women at home &#x2014; Biosignals acquisition and measurement. , 2015, , .		5
29	New Method for Beat-to-Beat Fetal Heart Rate Measurement Using Doppler Ultrasound Signal. Sensors, 2020, 20, 4079.	3.8	5
30	Instrumentation for Fetal Cardiac Performance Analysis During the Antepartum Period. , 2005, 2005, 6675-8.		4
31	Recognition of Fetal Movements – Automated Detection from Doppler Ultrasound Signals Compared to Maternal Perception. Journal of Medical Imaging and Health Informatics, 2015, 5, 1319-1326.	0.3	4
32	Sequential separation of twin pregnancy electrocardiograms. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2016, 64, 91-101.	0.8	4
33	Control and signal processing software embedded in smart wristband monitor of silent atrial fibrillation. , 2017, , .		4
34	Coping with limitations of fetal monitoring instrumentation to improve heart rhythm variability assessment. Biocybernetics and Biomedical Engineering, 2020, 40, 388-403.	5.9	4
35	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
36	Design and interfacing aspects of the medical instrumentation for modern hospital system for pregnancy and labour monitoring. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
37	OWA aggregation operator in robust filtering. , 2017, , .		3
38	Hardware design issues and functional requirements for smart wristband monitor of silent atrial fibrillation. , 2017, , .		3
39	Optimizing the Automated Detection of Atrial Fibrillation Episodes in Long-term Recording Instrumentation. , 2018, , .		3
40	Recognition of Atrial Fibrillation Episodes in Heart Rate Variability Signals Using a Machine Learning Approach. , 2019, , .		2
41	New Possibilities for Fetal Monitoring Using Unobtrusive Abdominal Electrocardiography. , 2019, , .		2
42	Ensuring the Real Time Signal Transmission Using GSM/Internet Technology for Remote Fetal Monitoring. Advances in Soft Computing, 2008, , 291-298.	0.4	2
43	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
44	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
45	Data Management System for Computer Aided Biophysical Monitoring. , 2005, 2005, 4712-5.		1
46	Simultaneous monitoring of mechanical and electrical properties of pregnant uterus. , 2006, , 10.		1
47	Detection of aorta anatomical structures characterized by various levels of pixel intensity. , 2016, , .		1
48	Automated Classification of Deceleration Patterns in Fetal Heart Rate Signal using Neural Networks. IFMBE Proceedings, 2007, , 5-8.	0.3	1
49	Robust Prediction with ANNBFS System. Lecture Notes in Computer Science, 2010, , 185-194.	1.3	1
50	Quality Based Adaptation of Signal Analysis Software in Pregnancy Home Care System. IFMBE Proceedings, 2014, , 559-562.	0.3	1
51	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
52	Fast prototyping of an interface between new bedside device and computerized fetal monitoring system. , 0, , .		0
53	New filtering approach for improving quality of the ECG signal recorded during a non-invasive electrical heart stimulation. , 2016, , .		0
54	Wireless Fetal Monitoring at Home with On-Line Signal Analysis. IFMBE Proceedings, 2011, , 906-909.	0.3	0

#	ARTICLE	IF	CITATIONS
55	Analysis of FHR Variability Extracted from Mechanical and Electrical Fetal Heart Activity Signals. IFMBE Proceedings, 2013, , 1074-1077.	0.3	0
56	Fuzzy System for Retrospective Evaluation of the Fetal State. IFMBE Proceedings, 2014, , 754-757.	0.3	0
57	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
58	Prediction of Newborn Sex with Neural Networks Approach to Fetal Cardiotocograms Classification. Advances in Soft Computing, 2008, , 299-306.	0.4	0
59	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