Janusz Jezewski

List of Publications by Year
in descending order

86 papers	1,493 citations	304743 22 h-index	345221 36 g-index
94 all docs	94 docs citations	94 times ranked	730 citing authors

#	Article	IF	Citations
1	Determination of fetal heart rate from abdominal signals: evaluation of beat-to-beat accuracy in relation to the direct fetal electrocardiogram. Biomedizinische Technik, 2012, 57, 383-94.	0.8	118
2	Non-Invasive Fetal Monitoring: A Maternal Surface ECG Electrode Placement-Based Novel Approach for Optimization of Adaptive Filter Control Parameters Using the LMS and RLS Algorithms. Sensors, 2017, 17, 1154.	3.8	86
3	Comparative Effectiveness of ICA and PCA in Extraction of Fetal ECG From Abdominal Signals: Toward Non-invasive Fetal Monitoring. Frontiers in Physiology, 2018, 9, 648.	2.8	86
4	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
5	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
6	A novel technique for fetal heart rate estimation from Doppler ultrasound signal. BioMedical Engineering OnLine, 2011, 10, 92.	2.7	62
7	Computerized analysis of fetal heart rate signals as the predictor of neonatal acidemia. Expert Systems With Applications, 2012, 39, 11846-11860.	7.6	50
8	Towards noise immune detection of fetal QRS complexes. Computer Methods and Programs in Biomedicine, 2010, 97, 241-256.	4.7	45
9	Detection of Atrial Fibrillation Episodes in Long-Term Heart Rhythm Signals Using a Support Vector Machine. Sensors, 2020, 20, 765.	3.8	45
10	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
11	Application of spatio-temporal filtering to fetal electrocardiogram enhancement. Computer Methods and Programs in Biomedicine, 2011, 104, 1-9.	4.7	42
12	Improving fetal heart rate signal interpretation by application of myriad filtering. Biocybernetics and Biomedical Engineering, 2013, 33, 211-221.	5.9	40
13	Is Abdominal Fetal Electrocardiography an Alternative to Doppler Ultrasound for FHR Variability Evaluation?. Frontiers in Physiology, 2017, 8, 305.	2.8	40
14	Fetal electrocardiograms, direct and abdominal with reference heartbeat annotations. Scientific Data, 2020, 7, 200.	5.3	40
15	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
16	Early predicting a risk of preterm labour by analysis of antepartum electrohysterograhic signals. Biocybernetics and Biomedical Engineering, 2016, 36, 574-583.	5.9	35
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	Selected design issues of the medical cyber-physical system for telemonitoring pregnancy at home. Microprocessors and Microsystems, 2016, 46, 35-43.	2.8	34

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19	Fetal state assessment using fuzzy analysis of fetal heart rate signals—Agreement with the neonatal outcome. Biocybernetics and Biomedical Engineering, 2013, 33, 145-155.	5.9	32
20	Extraction of Fetal Heart-Rate Signal as the Time Event Series From Evenly Sampled Data Acquired Using Doppler Ultrasound Technique. IEEE Transactions on Biomedical Engineering, 2008, 55, 805-810.	4.2	30
21	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
22	Non-Adaptive Methods of Fetal ECG Signal Processing. Advances in Electrical and Electronic Engineering, 2017, 15, .	0.3	25
23	Timing events in Doppler ultrasound signal of fetal heart activity. , 2004, 2006, 337-40.		22
24	A novel algorithm based on ensemble empirical mode decomposition for non-invasive fetal ECG extraction. PLoS ONE, 2021, 16, e0256154.	2.5	22
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	Pregnancy Telemonitoring with Smart Control of Algorithms for Signal Analysis. Journal of Medical Imaging and Health Informatics, 2015, 5, 1302-1310.	0.3	21
27	Centralised fetal monitoring system with hardware-based data flow control. , 2006, , 18.		19
28	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
29	Algorithm for detection of uterine contractions from electrohysterogram. , 0, , .		18
30	Fuzzy Analysis of Delivery Outcome Attributes for Improving the Automated Fetal State Assessment. Applied Artificial Intelligence, 2016, 30, 556-571.	3.2	17
31	Influence of gestation age on the performance of adaptive systems for fetal ECG extraction. Advances in Electrical and Electronic Engineering, 2017, 15, .	0.3	16
32	Fuzzy Ordered c-Means Clustering and Least Angle Regression for Fuzzy Rule-Based Classifier: Study for Imbalanced Data. IEEE Transactions on Fuzzy Systems, 2020, 28, 2799-2813.	9.8	15
33	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
34	Automated detection of uterine contractions in tocography signals – Comparison of algorithms. Biocybernetics and Biomedical Engineering, 2016, 36, 610-618.	5.9	13
35	Fuzzy classifier based on clustering with pairs of μ-hyperballs and its application to support fetal state assessment. Expert Systems With Applications, 2019, 118, 109-126.	7.6	13
36	Fetal monitoring with automated analysis of cardiotocogram: the Kompor system. , 0, , .		11

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37	Fetal heart rate variability: clinical experts versus computerized system interpretation. , 0, , .		11
38	A new method of saccadic eye movement detection for optokinetic nystagmus analysis. , 2012, 2012, 3464-7.		10
39	Evaluation of Fetal Heart Rate Baseline Estimation Method Using Testing Signals Based on a Statistical Model. , 2006, 2006, 3728-31.		9
40	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
41	Towards a medical cyber-physical system for home telecare of high-risk pregnancy. IFAC-PapersOnLine, 2015, 48, 466-473.	0.9	7
42	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
43	A new approach to cardiotocographic fetal monitoring based on analysis of bioelectrical signals. , 0, , .		6
44	Analysis of nonstationarities in fetal heart rate signal: inconsistency measures of baselines using acceleration/deceleration patterns. , 2003, , .		5
45	Detection of low amplitude fetal QRS complexes. , 2008, 2008, 4764-7.		5
46	Telemonitoring of pregnant women at home &#x2014; Biosignals acquisition and measurement. , 2015, , .		5
47	New Method for Beat-to-Beat Fetal Heart Rate Measurement Using Doppler Ultrasound Signal. Sensors, 2020, 20, 4079.	3.8	5
48	Abdominal electrohysterogram data acquisition problems and their source of origin. , 0, , .		4
49	Instrumentation for Fetal Cardiac Performance Analysis During the Antepartum Period. , 2005, 2005, 6675-8.		4
50	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
51	Coping with limitations of fetal monitoring instrumentation to improve heart rhythm variability assessment. Biocybernetics and Biomedical Engineering, 2020, 40, 388-403.	5.9	4
52	A New Personal Verification Technique Using Finger-Knuckle Imaging. Lecture Notes in Computer Science, 2016, , 515-524.	1.3	4
53	Virtual instrumentation in medical investigations and diagnosis support. , 0, , .		3
54	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

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55	Electrical Activity of Uterus as Reliable Information on Contractions During Pregnancy and Labour. Advances in Intelligent Systems and Computing, 2016, , 353-366.	0.6	3
56	Design and interfacing aspects of the medical instrumentation for modern hospital system for pregnancy and labour monitoring. , 2016, , .		3
57	Non-Invasive Fetal Electrocardiogram Extraction Based on Novel Hybrid Method for Intrapartum ST Segment Analysis. IEEE Access, 2021, 9, 28608-28631.	4.2	3
58	Interfacing fetal monitors in computerized cardiotocography system. , 0, , .		2
59	Coping with limitations of Doppler ultrasound fetal heart rate monitors. , 0, , .		2
60	Statistical approach to analysis of electrohysterographic signal. , 0, , .		2
61	New Approach to Quantitative Description of Deceleration of Fetal Heart Rate for the Patterns Classification. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3156-9.	0.5	2
62	New Possibilities for Fetal Monitoring Using Unobtrusive Abdominal Electrocardiography. , 2019, , .		2
63	Ensuring the Real Time Signal Transmission Using GSM/Internet Technology for Remote Fetal Monitoring. Advances in Soft Computing, 2008, , 291-298.	0.4	2
64	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
65	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
66	Declarative algebra and continuous query language for biomedical stream processing in fetal monitoring system. , 2004, 2004, 3175-8.		1
67	Simultaneous monitoring of mechanical and electrical properties of pregnant uterus. , 2006, , 10.		1
68	Classification of Uterine Electrical Activity Patterns for Early Detection of Preterm Birth. Advances in Intelligent Systems and Computing, 2013, , 559-568.	0.6	1
69	The Adaptive Fuzzy Meridian and Its Appliction to Fuzzy Clustering. Advances in Intelligent and Soft Computing, 2009, , 247-255.	0.2	1
70	Automated Classification of Deceleration Patterns in Fetal Heart Rate Signal using Neural Networks. IFMBE Proceedings, 2007, , 5-8.	0.3	1
71	Robust Prediction with ANNBFIS System. Lecture Notes in Computer Science, 2010, , 185-194.	1.3	1
72	Quality Based Adaptation of Signal Analysis Software in Pregnancy Home Care System. IFMBE Proceedings, 2014, , 559-562.	0.3	1

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73	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
74	Ergonomic visualization of cardiotocographic data in computerized fetal monitoring system. , 0, , .		0
75	Two-dimensional model for understanding the nature of abdominal surface potentials in late gestation. , 0, , .		0
76	Reliable data communication in modular fetal monitoring system. , 0, , .		0
77	Fast prototyping of an interface between new bedside device and computerized fetal monitoring system. , 0, , .		0
78	<I>A Special Section on</I> Medical Informatics and Technologies Conference MIT'2014. Journal of Medical Imaging and Health Informatics, 2015, 5, 1278-1280.	0.3	0
79	On aÂHybrid Fuzzy Clustering Method. Advances in Intelligent and Soft Computing, 2010, , 3-14.	0.2	0
80	Improvement in Fetal Heart Periodicity Measurement Using Doppler Ultrasound Signal. IFMBE Proceedings, 2011, , 133-136.	0.3	0
81	Granular Representation of Temporal Signals Using Differential Quadratures. Lecture Notes in Computer Science, 2011, , 72-79.	1.3	0
82	Analysis of FHR Variability Extracted from Mechanical and Electrical Fetal Heart Activity Signals. IFMBE Proceedings, 2013, , 1074-1077.	0.3	0
83	Fuzzy System for Retrospective Evaluation of the Fetal State. IFMBE Proceedings, 2014, , 754-757.	0.3	0
84	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
85	Baseline and Acceleration Episodes - Clinically Significant Nonstationarities in FHR Signal: Part II. Indirect Comparison. Advances in Soft Computing, 2005, , 535-542.	0.4	0
86	Prediction of Newborn Sex with Neural Networks Approach to Fetal Cardiotocograms Classification. Advances in Soft Computing, 2008, , 299-306.	0.4	0