JoÃ£o Bernardes

List of Publications by Year
in descending order

130	2,680	186265	223800
papers	citations	28 h-index	46 g-index

132	132	132	1718
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sisporto 2.0: A program for automated analysis of cardiotocograms. The Journal of Maternal-fetal Medicine, 2000, 9, 311-318.	0.3	205
2	Evaluation of interobserver agreement of cardiotocograms. International Journal of Gynecology and Obstetrics, 1997, 57, 33-37.	2.3	191
3	Linear and nonlinear fetal heart rate analysis of normal and acidemic fetuses in the minutes preceding delivery. Medical and Biological Engineering and Computing, 2006, 44, 847-855.	2.8	93
4	The Porto system for automated cardiotocographic signal analysis. Journal of Perinatal Medicine, 1991, 19, 61-65.	1.4	89
5	The limits of agreement and the intraclass correlation coefficient may be inconsistent in the interpretation of agreement. Journal of Clinical Epidemiology, 2011, 64, 264-269.	5.0	83
6	Linear and nonlinear analysis of heart rate patterns associated with fetal behavioral states in the antepartum period. Early Human Development, 2007, 83, 585-591.	1.8	79
7	Omniview-SisPortoÂ® 3.5 â€“ a central fetal monitoring station with online alerts based on computerized cardiotocogram+ST event analysis. Journal of Perinatal Medicine, 2008, 36, 260-4.	1.4	71
8	Twentyâ€five years after the FIGO guidelines for the use of fetal monitoring: Time for a simplified approach?. International Journal of Gynecology and Obstetrics, 2010, 110, 1-6.	2.3	69
9	Prediction of neonatal state by computer analysis of fetal heart rate tracings: the antepartum arm of the SisPortoÂ® multicentre validation study. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2005, 118, 52-60.	1.1	64
10	Mechanical properties of polypropylene mesh used in pelvic floor repair. International Urogynecology Journal, 2008, 19, 375-380.	1.4	62
11	Internal versus external intrapartum foetal heart rate monitoring: the effect on linear and nonlinear parameters. Physiological Measurement, 2006, 27, 307-319.	2.1	61
12	Prediction of neonatal acidemia by computer analysis of fetal heart rate and ST event signals. American Journal of Obstetrics and Gynecology, 2009, 201, 464.e1-464.e6.	1.3	56
13	Linear and complex heart rate dynamics vary with sex in relation to fetal behavioural states. Early Human Development, 2008, 84, 433-439.	1.8	55
14	Central Fetal Monitoring With and Without Computer Analysis. Obstetrics and Gynecology, 2017, 129, 83-90.	2.4	49
15	Objective computerized fetal heart rate analysis. International Journal of Gynecology and Obstetrics, 1998, 62, 141-147.	2.3	45
16	Monitoring fetal maturationâ€”objectives, techniques and indices of autonomic function. Physiological Measurement, 2017, 38, R61-R88.	2.1	45
17	Novel approach for fetal heart rate classification introducing grammatical evolution. Biomedical Signal Processing and Control, 2007, 2, 69-79.	5.7	42
18	Knowledge of adverse neonatal outcome alters clinicianâ€™ interpretation of the intrapartum cardiotocograph. BJOG: an International Journal of Obstetrics and Gynaecology, 2011, 118, 978-984.	2.3	42

#	Article	IF	Citations
19	Comparison of real beat-to-beat signals with commercially available 4ÂHz sampling on the evaluation of foetal heart rate variability. Medical and Biological Engineering and Computing, 2013, 51, 665-676.	2.8	42
20	An overview of central fetal monitoring systems in labour. Journal of Perinatal Medicine, 2013, 41, 93-99.	1.4	38
21	Agreement studies in obstetrics and gynaecology: inappropriateness, controversies and consequences. BJOG: an International Journal of Obstetrics and Gynaecology, 2005, 112, 667-669.	2.3	37
22	SisPorto 2.0: A Program for Automated Analysis of Cardiotocograms. Journal of Maternal-Fetal and Neonatal Medicine, 2000, 9, 311-318.	1.5	35
23	Sex differences in linear and complex fetal heart rate dynamics of normal and acidemic fetuses in the minutes preceding delivery. Journal of Perinatal Medicine, 2009, 37, 168-76.	1.4	35
24	Fetal QRS detection and heart rate estimation: a wavelet-based approach. Physiological Measurement, 2014, 35, 1723-1735.	2.1	35
25	Comparison of fetal heart rate baseline estimation by SisPortoÂ® 2.01 and a consensus of clinicians. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2004, 117, 174-178.	1.1	34
26	Interobserver agreement in CTG interpretation using the 2015 FIGO guidelines for intrapartum fetal monitoring. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2016, 205, 27-31.	1.1	33
27	A randomised clinical trial of intrapartum fetal monitoring with computer analysis and alerts versus previously available monitoring. BMC Pregnancy and Childbirth, 2010, 10, 71.	2.4	32
28	SisPorto 4.0 â€“ computer analysis following the 2015 FIGO Guidelines for intrapartum fetal monitoring. Journal of Maternal-Fetal and Neonatal Medicine, 2017, 30, 62-67.	1.5	31
29	Can the reproducibility of fetal heart rate baseline estimation be improved?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2004, 112, 49-54.	1.1	30
30	Assessment of Disagreement: A New Information-Based Approach. Annals of Epidemiology, 2010, 20, 555-561.	1.9	29
31	Co-expression network analysis and genetic algorithms for gene prioritization in preeclampsia. BMC Medical Genomics, 2013, 6, 51.	1.5	29
32	Comparison of a computer system evaluation of intrapartum cardiotocographic events and a consensus of clinicians. Journal of Perinatal Medicine, 2010, 38, 191-5.	1.4	28
33	The persistent challenge of foetal heart rate monitoring. Current Opinion in Obstetrics and Gynecology, 2010, 22, 104-109.	2.0	27
34	Classification of foetal heart rate sequences based on fractal features. Medical and Biological Engineering and Computing, 1998, 36, 197-201.	2.8	25
35	Semiautomated ultrasonographic measurement of fetal nuchal translucency using a computer software tool. Ultrasound in Medicine and Biology, 1998, 24, 51-54.	1.5	25
36	Clustering Fetal Heart Rate Tracings by Compression. , 2006, , .		25

#	Article	IF	Citations
37	Complexity-loss in fetal heart rate dynamics during labor as a potential biomarker of acidemia. Early Human Development, 2014, 90, 67-71.	1.8	25
38	A more objective fetal heart rate baseline estimation. BJOG: an International Journal of Obstetrics and Gynaecology, 1996, 103, 714-715.	2.3	24
39	Gender-specific evolution of fetal heart rate variability throughout gestation: A study of 8823 cases. Early Human Development, 2017, 115, 38-45.	1.8	24
40	Gender-specific heart rate dynamics in severe intrauterine growth-restricted fetuses. Early Human Development, 2013, 89, 431-437.	1.8	23
41	Entropy and compression: two measures of complexity. Journal of Evaluation in Clinical Practice, 2013, 19, 1101-1106.	1.8	23
42	Preeclampsia: a bioinformatics approach through protein-protein interaction networks analysis. BMC Systems Biology, 2012, 6, 97.	3.0	22
43	Access to computerised analysis of intrapartum cardiotocographs improves cliniciansâ€™ prediction of newborn umbilical artery blood pH. BJOG: an International Journal of Obstetrics and Gynaecology, 2010, 117, 1288-1293.	2.3	20
44	Longitudinal evaluation of computerized cardiotocographic parameters throughout pregnancy in normal fetuses: a prospective cohort study. Acta Obstetricia Et Gynecologica Scandinavica, 2016, 95, 1143-1152.	2.8	20
45	Analysis of heart rate variability in a rat model of induced pulmonary hypertension. Medical Engineering and Physics, 2010, 32, 746-752.	1.7	19
46	Antepartum fetal cerebral hemorrhage not predicted by current surveillance methods in cholestasis or pregnancy. Obstetrics and Gynecology, 1997, 89, 803-804.	2.4	18
47	Linear and nonlinear heart-rate analysis in a rat model of acute anoxia. Physiological Measurement, 2008, 29, 1133-1143.	2.1	18
48	Gender-specific reference charts for cardiotocographic parameters throughout normal pregnancy: a retrospective cross-sectional study of 9701 fetuses. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2016, 199, 102-107.	1.1	18
49	Computerized analysis of cardiotocograms and ST signals is associated with significant reductions in hypoxic-ischemic encephalopathy and cesarean delivery: an observational study in 38,466 deliveries. American Journal of Obstetrics and Gynecology, 2019, 220, 269.e1-269.e8.	1.3	18
50	Early, variable and late decelerations: can a consensus be reached in their identification?. International Journal of Gynecology and Obstetrics, 1999, 65, 305-306.	2.3	17
51	Evolution of linear and nonlinear fetal heart rate indices throughout pregnancy in appropriate, small for gestational age and preterm fetuses: A cohort study. Computer Methods and Programs in Biomedicine, 2018, 153, 191-199.	4.7	17
52	Monitoring of cardiac-extracardiac haemodynamics and automated fetal heart rate preceding intrauterine death. European Journal of Obstetrics, Gynecology and Reproductive Biology, 1996, 64, 3-6.	1.1	16
53	Development of a birthweight standard and comparison with currently used standards. What is a 10th centile?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2016, 206, 184-193.	1.1	16
54	Neurological damage arising from intrapartum hypoxia/acidosis. Best Practice and Research in Clinical Obstetrics and Gynaecology, 2016, 30, 79-86.	2.8	16

#	Article	IF	Citations
55	Development and evaluation of an algorithm for computer analysis of maternal heart rate during labor. Computers in Biology and Medicine, 2014, 49, 30-35.	7.0	15
56	Electrocardiography versus photoplethysmography in assessment of maternal heart rate variability during labor. SpringerPlus, 2016, 5, 1079.	1.2	15
57	Case report: intra-partum utero-ovarian vessels rupture. Archives of Gynecology and Obstetrics, 2009, 279, 583-585.	1.7	14
58	Information-based measure of disagreement for more than two observers: a useful tool to compare the degree of observer disagreement. BMC Medical Research Methodology, 2013, 13, 47.	3.1	14
59	Improvements in fetal heart rate analysis by the removal of maternal-fetal heart rate ambiguities. BMC Pregnancy and Childbirth, 2015, 15, 301.	2.4	14
60	Toward the improvement in fetal monitoring during labor with the inclusion of maternal heart rate analysis. Medical and Biological Engineering and Computing, 2016, 54, 691-699.	2.8	14
61	Monitoring Incremental Histogram Distribution for Change Detection in Data Streams. Lecture Notes in Computer Science, 2010, , 25-42.	1.3	14
62	Mathematical model for educational simulation of the oxygen delivery to the fetus. Control Engineering Practice, 2002, 10, 59-66.	5.5	13
63	Cardiotocographic parameters in smallâ€forâ€gestationalâ€age fetuses: How do they vary from normal at different gestational ages? A study of 11687 fetuses from 25 to 40 weeks of pregnancy. Journal of Obstetrics and Gynaecology Research, 2017, 43, 476-485.	1.3	13
64	Longitudinal changes of cardiotocographic parameters throughout pregnancy: a prospective cohort study comparing small-for-gestational-age and normal fetuses from 24 to 40 weeks. Journal of Perinatal Medicine, 2017, 45, 493-501.	1.4	13
65	On the prediction of foetal acidaemia: A spectral analysis-based approach. Computers in Biology and Medicine, 2019, 109, 235-241.	7.0	12
66	Sex differences in the fetal heart rate variability indices of twins. Journal of Perinatal Medicine, 2015, 43, 221-225.	1.4	11
67	Comparison of the effect of different sampling modes on computer analysis of cardiotocograms. Computers in Biology and Medicine, 2015, 64, 62-66.	7.0	11
68	Sisporto 2.0: A program for automated analysis of cardiotocograms. The Journal of Maternal-fetal Medicine, 2000, 9, 311-318.	0.3	11
69	Frequency Domain and Entropy Analysis of Fetal Heart Rate: Appealing Tools for Fetal Surveillance and Pharmacodynamic Assessment of Drugs. Cardiovascular & Hematological Disorders Drug Targets, 2008, 8, 91-98.	0.7	9
70	Differences between external and internal fetal heart rate monitoring during the second stage of labor: a prospective observational study. Journal of Perinatal Medicine, 2014, 42, 493-498.	1.4	8
71	Simultaneous monitoring of maternal and fetal heart rate variability during labor in relation with fetal gender. Developmental Psychobiology, 2017, 59, 832-839.	1.6	8
72	Fetal heart-rate monitoring during maternal hypoglycaemic coma: A case report. European Journal of Obstetrics, Gynecology and Reproductive Biology, 1998, 79, 223-225.	1.1	7

#	Article	IF	Citations
73	Computer analysis of maternalâ€“fetal heart rate recordings during labor in relation with maternalâ€“fetal attachment and prediction of newborn acidemia. Journal of Maternal-Fetal and Neonatal Medicine, 2016, 29, 1440-1444.	1.5	7
74	Entropy and Compression Capture Different Complexity Features: The Case of Fetal Heart Rate. Entropy, 2017, 19, 688.	2.2	7
75	Audit of a fetal central monitoring station in a clinical setting. Journal of Maternal-Fetal and Neonatal Medicine, 2011, 24, 1249-1253.	1.5	6
76	Should European perinatal indicators be revisited?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2013, 170, 85-89.	1.1	6
77	Can fetal heart rate variability obtained from cardiotocography provide the same diagnostic value like from electrophysiological interbeat intervals?. Physiological Measurement, 2021, 42, 015006.	2.1	6
78	Computerized fetal heart rate analysis in labour based on 2-s sampling. Can it proceed with confidence?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 1995, 63, 105.	1.1	5
79	The effect of different sampling intervals on the measurement of intrapartum fetal heart rate variability. Obstetrics and Gynecology, 1997, 90, 318-319.	2.4	5
80	An interactive web site for research on fetal heart rate monitoring. Obstetrics and Gynecology, 2000, 95, 309-311.	2.4	5
81	Computer quantification of shortâ€term variability as an adjunct to fetal electrocardiographic monitoring. BJOG: an International Journal of Obstetrics and Gynaecology, 2007, 114, 1445-1446.	2.3	5
82	Comparison of different methods of heart rate entropy analysis during acute anoxia superimposed on a chronic rat model of pulmonary hypertension. Medical Engineering and Physics, 2013, 35, 559-568.	1.7	5
83	Fetal behavioral dynamics in cephalic versus breech presentations. Developmental Psychobiology, 2014, 56, 1595-1600.	1.6	5
84	Building a Maternal and Newborn Care Training Programme for Health-Care Professionals in Guinea-Bissau. Acta Medica Portuguesa, 2017, 30, 734-741.	0.4	5
85	Complexity of Cardiotocographic Signals as A Predictor of Labor. Entropy, 2020, 22, 104.	2.2	5
86	Complexity and categorical analysis may improve the interpretation of agreement studies using continuous variables. Journal of Evaluation in Clinical Practice, 2011, 17, 511-514.	1.8	4
87	Linear and Nonlinear Analysis of Fetal Heart Rate Variability. , 2016, , 119-132.		4
88	Linear and non-linear analysis of uterine contraction signals obtained with tocodynamometry in prediction of operative vaginal delivery. Journal of Perinatal Medicine, 2017, 45, 327-332.	1.4	4
89	â€œClassic nonstress testâ€•and â€œambulatory stress testâ€•in the assessment of umbilical cord compression. American Journal of Obstetrics and Gynecology, 1992, 167, 1911.	1.3	3
90	Some concerns about the new research guidelines for interpretation of electronic fetal heart rate monitoring. American Journal of Obstetrics and Gynecology, 1998, 179, 560.	1.3	3

#	Article	IF	Citations
91	Further concerns about the National Institute of Child Health and Human Development guidelines for interpretation of electronic fetal heart rate monitoring. American Journal of Obstetrics and Gynecology, 2001, 184, 1587-1588.	1.3	3
92	Maternal heart rate analysis during labor. Has the time come for computerized analysis?. Acta Obstetricia Et Gynecologica Scandinavica, 2012, 91, 1474-1474.	2.8	3
93	Prenatal observation of heart rate sequences presenting entropic analogies with Sudden Infant Death Syndrome: Preliminary report. , 2013, , .		3
94	AÃ§Ãµes Disciplinares em Ginecologia e ObstetrÃcia na RegiÃ£o Norte de Portugal nos Anos 2008 a 2012. Acta Medica Portuguesa, 2015, 28, 194-203.	0.4	3
95	Foetal circadian rhythms, interpretation of foetal heart rate recordings and clues about foetal preparedness for stressful situations. Acta Physiologica, 2018, 224, e13174.	3.8	3
96	Maternal fever in term labour in relation to fetal tachycardia, cord artery acidaemia and neonatal infection. BJOG: an International Journal of Obstetrics and Gynaecology, 1998, 105, 241-241.	2.3	2
97	Introducing Grammatical Evolution in Fetal Heart Rate Analysis and Classification. , 2006, , .		2
98	Observer reliability and agreement: differences, difficulties, and controversies. Journal of Clinical Epidemiology, 2011, 64, 702.	5.0	2
99	Comparison of experts and computer analysis in fetal heart rate interpretation: we need to agree on what agreement is. American Journal of Obstetrics and Gynecology, 2011, 204, e11-e12.	1.3	2
100	The effect of gender, gestational age and behavioral states on fetal heart rate variability. , 2014, , .		2
101	Gestational age and fetal growth assessment among obstetricians. Journal of Maternal-Fetal and Neonatal Medicine, 2015, 28, 2034-2039.	1.5	2
102	Laparoscopic surgery during pregnancy. A survey among European Obstetricians and Gynecologists. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2016, 206, 247-248.	1.1	2
103	Hysteroscopic Findings Related with the Assessment and Treatment of Uterine Florid Cystic Endosalpingiosis: A Case Report and Review of All the Published Cases. Acta Medica Portuguesa, 2020, 33, .	0.4	2
104	Long-Term Effect of Anti-Vascular Endothelial Growth Factor (Anti-VEGF) Injections in Choroidal Neovascularization Secondary to Angioid Streaks. Journal of Ophthalmology, 2022, 2022, 1-7.	1.3	2
105	How often should we perform nonstress tests in normal third-trimester pregnancies? Preferably, not as often as every 2 days!. American Journal of Obstetrics and Gynecology, 1996, 175, 231.	1.3	1
106	A multicentre comparative study of 17 experts and an intelligent computer system for managing labour using the cardiotocogram. BJOG: an International Journal of Obstetrics and Gynaecology, 1996, 103, 489-489.	2.3	1
107	Computerized estimation of the baseline fetal heart rate in labour: the low frequency line. BJOG: an International Journal of Obstetrics and Gynaecology, 1998, 105, 1128-1129.	2.3	1
108	Fetal cardiotocography during cesarean section. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2000, 93, 221.	1.1	1

#	Article	IF	Citations
109	Accuracy of outpatient biopsy in the diagnosis of endometrial cancer: a systematic quantitative review. BJOG: an International Journal of Obstetrics and Gynaecology, 2003, 110, 786-786.	2.3	1
110	Admission cardiotocography. Lancet, The, 2003, 361, 1741.	13.7	1
111	Differences and consequences in interobserver variation in intrapartum fetal heart rate assessment. American Journal of Obstetrics and Gynecology, 2009, 200, e8.	1.3	1
112	Agreement on cardiotocogram interpretation and clinical decision using the STAN guidelines. BJOG: an International Journal of Obstetrics and Gynaecology, 2009, 116, 1540-1541.	2.3	1
113	Erratum to â€œThe limits of agreement and the intraclass correlation coefficient may be inconsistent in the interpretation of agreementâ€•[J Clin Epidemiol 2011;64(3):264â€“9.]. Journal of Clinical Epidemiology, 2011, 64, 703.	5.0	1
114	Poor reliability of visual analysis of fetal heart rate tracings: what should be done about it?. American Journal of Obstetrics and Gynecology, 2012, 206, e6.	1.3	1
115	Preeclampsia Prediction and Management. Obstetrics and Gynecology International, 2014, 2014, 1-2.	1.3	1
116	Spatio-temporal analysis of preterm birth in Portugal and its relation with environmental variables. , 2016, , .		1
117	Effect of clinical information and previous exam execution on observer agreement and reliability in the analysis of hysteroscopic video-recordings. Archives of Gynecology and Obstetrics, 2018, 297, 393-400.	1.7	1
118	Low sensitivity of the new FIGO classification system for electronic fetal monitoring to identify fetal acidosis in the second stage of labor?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2021, 258, 464-465.	1.1	1
119	Letters to the Editor. Gynecologic Oncology, 1995, 58, 404-405.	1.4	0
120	Reports on the clinical use of fetal biophysical testing: Shouldn't they take into consideration the important results from the studies on validity and efficacy?. American Journal of Obstetrics and Gynecology, 1995, 173, 1636.	1.3	0
121	THE JARISCH-HERXHEIMER REACTION AND FETAL MONITORING CHANGES IN PREGNANT WOMEN TREATED FOR SYPHILIS. Obstetrics and Gynecology, 1999, 93, 631.	2.4	0
122	AN INTERACTIVE WEB SITE FOR RESEARCH ON FETAL HEART RATE MONITORING. Obstetrics and Gynecology, 2000, 95, 309-311.	2.4	0
123	The effect of cigarette smoking on fetal heart rate characteristics. Obstetrics and Gynecology, 2002, 100, 828-829.	2.4	0
124	Statistical comparison of three analysis methods of fBm sequences. , 2003, , .		0
125	Interobserver agreement according to STAN guidelines. Acta Obstetricia Et Gynecologica Scandinavica, 2008, 87, 1260-1260.	2.8	0
126	Assessment and reporting of the reproducibility of fetal heart rate monitoring. American Journal of Obstetrics and Gynecology, 2008, 198, 343.	1.3	0

#	Article	IF	Citations
127	Erratum to â€œThe limits of agreement and the intraclass correlation coefficient may be inconsistent in the interpretation of agreementâ€•[J Clin Epidemiol 2011;64:264â€“9]. Journal of Clinical Epidemiology, 2011, 64, 1049.	5.0	0
128	Impact of the introduction of fetal central monitoring on hospital expenses with cardiotocographic paper. Journal of Obstetrics and Gynaecology, 2014, 34, 82-84.	0.9	0
129	How can we achieve consensual indicators to be better accepted and more widely used?. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2014, 173, 123-124.	1.1	0
130	A letter to the editor regarding the article "Impaired validity of the new FIGO and Swedish CTG classification templates to identify fetal acidosis in the first stage of laborâ€• Journal of Maternal-Fetal and Neonatal Medicine, 2021, , 1-2.	1.5	0