Sabine Van Huffel

List of Publications by Year
in descending order

		26630	33894
389 papers	15,000 citations	56 h-index	99 g-index
403 all docs	403 docs citations	403 times ranked	14356 citing authors

#	Article	IF	Citations
1	Overview of total least-squares methods. Signal Processing, 2007, 87, 2283-2302.	3.7	738
2	Canonical Correlation Analysis Applied to Remove Muscle Artifacts From the Electroencephalogram. IEEE Transactions on Biomedical Engineering, 2006, 53, 2583-2587.	4.2	418
3	Logistic Regression Model to Distinguish Between the Benign and Malignant Adnexal Mass Before Surgery: A Multicenter Study by the International Ovarian Tumor Analysis Group. Journal of Clinical Oncology, 2005, 23, 8794-8801.	1.6	396
4	Review on solving the forward problem in EEG source analysis. Journal of NeuroEngineering and Rehabilitation, 2007, 4, 46.	4.6	388
5	Antenatal Maternal Anxiety is Related to HPA-Axis Dysregulation and Self-Reported Depressive Symptoms in Adolescence: A Prospective Study on the Fetal Origins of Depressed Mood. Neuropsychopharmacology, 2008, 33, 536-545.	5.4	387
6	Source Separation From Single-Channel Recordings by Combining Empirical-Mode Decomposition and Independent Component Analysis. IEEE Transactions on Biomedical Engineering, 2010, 57, 2188-2196.	4.2	308
7	The accuracy of transvaginal ultrasonography for the diagnosis of ectopic pregnancy prior to surgery. Human Reproduction, 2005, 20, 1404-1409.	0.9	267
8	A tutorial on support vector machine-based methods for classification problems in chemometrics. Analytica Chimica Acta, 2010, 665, 129-145.	5.4	262
9	Triple€negative breast cancer: Present challenges and new perspectives. Molecular Oncology, 2010, 4, 209-229.	4.6	252
10	A Novel Algorithm for the Automatic Detection of Sleep Apnea From Single-Lead ECG. IEEE Transactions on Biomedical Engineering, 2015, 62, 2269-2278.	4.2	246
11	Use of Tissue Oxygenation Index and Fractional Tissue Oxygen Extraction as Non-Invasive Parameters for Cerebral Oxygenation. Neonatology, 2007, 92, 120-126.	2.0	203
12	Automatic segmentation and volumetry of multiple sclerosis brain lesions from MR images. NeuroImage: Clinical, 2015, 8, 367-375.	2.7	196
13	MR spectroscopy quantitation: a review of time-domain methods. NMR in Biomedicine, 2001, 14, 233-246.	2.8	189
14	Analysis and Properties of the Generalized Total Least Squares Problem $AX approx B$ When Some or All Columns in A are Subject to Error. SIAM Journal on Matrix Analysis and Applications, 1989, 10, 294-315.	1.4	178
15	Reference values of regional cerebral oxygen saturation during the first 3 days of life in preterm neonates. Pediatric Research, 2016, 79, 55-64.	2.3	158
16	Neonatal Seizure Detection Using Deep Convolutional Neural Networks. International Journal of Neural Systems, 2019, 29, 1850011.	5.2	157
17	Automated Epileptic Seizure Detection Based on Wearable ECG and PPG in a Hospital Environment. Sensors, 2017, 17, 2338.	3.8	133
18	Instantaneous changes in heart rate regulation due to mental load in simulated office work. European Journal of Applied Physiology, 2011, 111, 1497-1505.	2.5	131

#	Article	IF	Citations
19	An automated quantitation of short echo time MRS spectra in an open source software environment: AQSES. NMR in Biomedicine, 2007, 20, 493-504.	2.8	127
20	Multiproject–multicenter evaluation of automatic brain tumor classification by magnetic resonance spectroscopy. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2009, 22, 5-18.	2.0	126
21	Support vector methods for survival analysis: a comparison between ranking and regression approaches. Artificial Intelligence in Medicine, 2011, 53, 107-118.	6.5	125
22	A combination of parallel factor and independent component analysis. Signal Processing, 2012, 92, 2990-2999.	3.7	120
23	MRS signal quantitation: A review of time- and frequency-domain methods. Journal of Magnetic Resonance, 2008, 195, 134-144.	2.1	118
24	Acute effects of tamoxifen and third-generation aromatase inhibitors on menopausal symptoms of breast cancer patients. Anti-Cancer Drugs, 2004, 15, 753-760.	1.4	116
25	Removal of Muscle Artifacts from EEG Recordings of Spoken Language Production. Neuroinformatics, 2010, 8, 135-150.	2.8	115
26	Ultrasound characteristics of different types of adnexal malignancies. Gynecologic Oncology, 2006, 102, 41-48.	1.4	106
27	Review of sleep-EEG in preterm and term neonates. Early Human Development, 2017, 113, 87-103.	1.8	99
28	Prospective Internal Validation of Mathematical Models to Predict Malignancy in Adnexal Masses: Results from the International Ovarian Tumor Analysis Study. Clinical Cancer Research, 2009, 15, 684-691.	7.0	97
29	Enhanced resolution based on minimum variance estimation and exponential data modeling. Signal Processing, 1993, 33, 333-355.	3.7	96
30	Application of Kernel Principal Component Analysis for Single-Lead-ECG-Derived Respiration. IEEE Transactions on Biomedical Engineering, 2012, 59, 1169-1176.	4.2	96
31	Non-EEG seizure detection systems and potential SUDEP prevention: State of the art. Seizure: the Journal of the British Epilepsy Association, 2016, 41, 141-153.	2.0	91
32	Mobile EEG on the bike: disentangling attentional and physical contributions to auditory attention tasks. Journal of Neural Engineering, 2016, 13, 046017.	3.5	89
33	Improving the Interpretation of Ictal Scalp EEG: BSS?CCA Algorithm for Muscle Artifact Removal. Epilepsia, 2007, 48, 950-958.	5.1	86
34	Removal of BCG artifacts from EEG recordings inside the MR scanner: A comparison of methodological and validation-related aspects. NeuroImage, 2010, 50, 920-934.	4.2	85
35	Non-EEG seizure-detection systems and potential SUDEP prevention: State of the art. Seizure: the Journal of the British Epilepsy Association, 2013, 22, 345-355.	2.0	85
36	Regularized Total Least Squares Based on Quadratic Eigenvalue Problem Solvers. BIT Numerical Mathematics, 2004, 44, 793-812.	2.0	84

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37	The element-wise weighted total least-squares problem. Computational Statistics and Data Analysis, 2006, 50, 181-209.	1.2	82
38	Best Low Multilinear Rank Approximation of Higher-Order Tensors, Based on the Riemannian Trust-Region Scheme. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 115-135.	1.4	81
39	A combined MRI and MRSI based multiclass system for brain tumour recognition using LS-SVMs with class probabilities and feature selection. Artificial Intelligence in Medicine, 2007, 40, 87-102.	6.5	79
40	HealthAgents: distributed multi-agent brain tumor diagnosis andÂprognosis. Applied Intelligence, 2009, 30, 191-202.	5.3	78
41	Comparison between Scalp EEG and Behind-the-Ear EEG for Development of a Wearable Seizure Detection System for Patients with Focal Epilepsy. Sensors, 2018, 18, 29.	3.8	78
42	Axillary lymph node status of operable breast cancers by combined steroid receptor and HER-2 status: triple positive tumours are more likely lymph node positive. Breast Cancer Research and Treatment, 2009, 113, 181-187.	2.5	76
43	Inclusion of CA-125 Does Not Improve Mathematical Models Developed to Distinguish Between Benign and Malignant Adnexal Tumors. Journal of Clinical Oncology, 2007, 25, 4194-4200.	1.6	75
44	Relationship Between Age and Axillary Lymph Node Involvement in Women With Breast Cancer. Journal of Clinical Oncology, 2009, 27, 2931-2937.	1.6	72
45	External Validation of Diagnostic Models to Estimate the Risk of Malignancy in Adnexal Masses. Clinical Cancer Research, 2012, 18, 815-825.	7.0	72
46	Analysis and Solution of the Nongeneric Total Least Squares Problem. SIAM Journal on Matrix Analysis and Applications, 1988, 9, 360-372.	1.4	68
47	Cerebral and Systemic Hemodynamic Effects of Intravenous Bolus Administration of Propofol in Neonates. Neonatology, 2010, 98, 57-63.	2.0	67
48	Extending the c-statistic to nominal polytomous outcomes: the Polytomous Discrimination Index. Statistics in Medicine, 2012, 31, 2610-2626.	1.6	67
49	External Validation of Mathematical Models to Distinguish Between Benign and Malignant Adnexal Tumors: A Multicenter Study by the International Ovarian Tumor Analysis Group. Clinical Cancer Research, 2007, 13, 4440-4447.	7.0	65
50	Integrating diffusion kurtosis imaging, dynamic susceptibility-weighted contrast-enhanced MRI, and short echo time chemical shift imaging for grading gliomas. Neuro-Oncology, 2014, 16, 1010-1021.	1.2	64
51	Comparison of unsupervised classification methods for brain tumor segmentation using multi-parametric MRI. NeuroImage: Clinical, 2016, 12, 753-764.	2.7	64
52	Fast Structured Total Least Squares Algorithm for Solving the Basic Deconvolution Problem. SIAM Journal on Matrix Analysis and Applications, 2000, 22, 533-553.	1.4	63
53	Fast Removal of Residual Water in Proton Spectra. Journal of Magnetic Resonance, 1998, 132, 197-203.	2.1	62
54	Automated Detection of Tonicâ€"Clonic Seizures Using 3-D Accelerometry and Surface Electromyography in Pediatric Patients. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1333-1341.	6.3	62

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55	Measurement of Neurovascular Coupling in Neonates. Frontiers in Physiology, 2019, 10, 65.	2.8	61
56	On the relevance of automatically selected single-voxel MRS and multimodal MRI and MRSI features for brain tumour differentiation. Computers in Biology and Medicine, 2011, 41, 87-97.	7.0	60
57	The Restricted Total Least Squares Problem: Formulation, Algorithm, and Properties. SIAM Journal on Matrix Analysis and Applications, 1991, 12, 292-309.	1.4	58
58	Incorporating structural information from the multichannel EEG improves patient-specific seizure detection. Clinical Neurophysiology, 2012, 123, 2352-2361.	1.5	58
59	An Automated Quiet Sleep Detection Approach in Preterm Infants as a Gateway to Assess Brain Maturation. International Journal of Neural Systems, 2017, 27, 1750023.	5.2	55
60	Automatic Screening of Sleep Apnea Patients Based on the SpO_2 Signal. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 607-617.	6.3	55
61	Spatially constrained ICA algorithm with an application in EEG processing. Signal Processing, 2011, 91, 1963-1972.	3.7	54
62	A Shift Invariance-Based Order-Selection Technique for Exponential Data Modelling. IEEE Signal Processing Letters, 2007, 14, 473-476.	3.6	53
63	Line length as a robust method to detect high-activity events: Automated burst detection in premature EEG recordings. Clinical Neurophysiology, 2014, 125, 1985-1994.	1.5	53
64	Complexity Analysis of Neonatal EEG Using Multiscale Entropy: Applications in Brain Maturation and Sleep Stage Classification. Entropy, 2017, 19, 516.	2.2	52
65	Cerebral Tissue Oxygenation and Regional Oxygen Saturation Can Be Used to Study Cerebral Autoregulation in Prematurely Born Infants. Pediatric Research, 2011, 69, 548-553.	2.3	51
66	Long-term home monitoring of hypermotor seizures by patient-worn accelerometers. Epilepsy and Behavior, 2013, 26, 118-125.	1.7	51
67	Tamoxifen Metabolism and Efficacy in Breast Cancer: A Prospective Multicenter Trial. Clinical Cancer Research, 2018, 24, 2312-2318.	7.0	51
68	Automated EEG sleep staging in the term-age baby using a generative modelling approach. Journal of Neural Engineering, 2018, 15, 036004.	3.5	51
69	Parameter Estimation with Prior Knowledge of Known Signal Poles for the Quantification of NMR Spectroscopy Data in the Time Domain. Journal of Magnetic Resonance Series A, 1996, 119, 225-234.	1.6	50
70	Accelerometry-Based Home Monitoring for Detection of Nocturnal Hypermotor Seizures Based on Novelty Detection. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1026-1033.	6.3	50
71	Consistency of elementwise-weighted total least squares estimator in a multivariate errors-in-variables model AX=B. Metrika, 2004, 59, 75-97.	0.8	49
72	Nosologic imaging of the brain: segmentation and classification using MRI and MRSI. NMR in Biomedicine, 2009, 22, 374-390.	2.8	49

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73	Block term decomposition for modelling epileptic seizures. Eurasip Journal on Advances in Signal Processing, 2014, 2014, .	1.7	49
74	Accurate Quantification of 1H Spectra: From Finite Impulse Response Filter Design for Solvent Suppression to Parameter Estimation. Journal of Magnetic Resonance, 1999, 139, 189-204.	2.1	48
75	Clinical information does not improve the performance of mathematical models in predicting the outcome ofÂpregnancies of unknown location. Fertility and Sterility, 2007, 88, 572-580.	1.0	48
76	Peri-ictal ECG changes in childhood epilepsy: Implications for detection systems. Epilepsy and Behavior, 2013, 29, 72-76.	1.7	48
77	Assessing calibration of multinomial risk prediction models. Statistics in Medicine, 2014, 33, 2585-2596.	1.6	48
78	Machine Learning Approach for Classifying Multiple Sclerosis Courses by Combining Clinical Data with Lesion Loads and Magnetic Resonance Metabolic Features. Frontiers in Neuroscience, 2017, 11, 398.	2.8	48
79	Visual seizure annotation and automated seizure detection using behindâ€theâ€ear electroencephalographic channels. Epilepsia, 2020, 61, 766-775.	5.1	48
80	Differential-geometric Newton method for the best rank-(R 1, R 2, R 3) approximation of tensors. Numerical Algorithms, 2009, 51, 179-194.	1.9	47
81	Quiet sleep detection in preterm infants using deep convolutional neural networks. Journal of Neural Engineering, 2018, 15, 066006.	3.5	47
82	Comparison of total least squares and instrumental variable methods for parameter estimation of transfer function models. International Journal of Control, 1989, 50, 1039-1056.	1.9	46
83	Accurate prediction of pregnancy viability by means of a simple scoring system. Human Reproduction, 2013, 28, 68-76.	0.9	46
84	Evaluation of a Multichannel Non-Contact ECG System and Signal Quality Algorithms for Sleep Apnea Detection and Monitoring. Sensors, 2018, 18, 577.	3.8	45
85	Tissue segmentation and classification of MRSI data using canonical correlation analysis. Magnetic Resonance in Medicine, 2005, 54, 1519-1529.	3.0	44
86	The effect of changes in tPCO2 on the fractional tissue oxygen extraction â€" as measured by near-infrared spectroscopy â€" in neonates during the first days of life. European Journal of Paediatric Neurology, 2009, 13, 128-134.	1.6	44
87	Automatic video detection of body movement during sleep based on optical flow in pediatric patients with epilepsy. Medical and Biological Engineering and Computing, 2010, 48, 923-931.	2.8	43
88	Exponential data fitting using multilinear algebra: the decimative case. Journal of Chemometrics, 2009, 23, 341-351.	1.3	42
89	The â€œwhyâ€•and â€œhowâ€•of JointICA: Results from a visual detection task. NeuroImage, 2012, 60, 1171-1185.	4.2	42
90	Online Automated Seizure Detection in Temporal Lobe Epilepsy Patients Using Single-lead ECG. International Journal of Neural Systems, 2017, 27, 1750022.	5.2	42

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91	Nonconvulsive Epileptic Seizure Detection in Scalp EEG Using Multiway Data Analysis. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 660-671.	6.3	42
92	A convolutional neural network outperforming state-of-the-art sleep staging algorithms for both preterm and term infants. Journal of Neural Engineering, 2020, 17, 016028.	3.5	41
93	Analysis of the Structured Total Least Squares Problem for Hankel/Toeplitz Matrices. Numerical Algorithms, 2001, 27, 89-114.	1.9	40
94	Cardiorespiratory Dynamic Response to Mental Stress: A Multivariate Time-Frequency Analysis. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-12.	1.3	39
95	Compressed Sensing of Multichannel EEG Signals: The Simultaneous Cosparsity and Low-Rank Optimization. IEEE Transactions on Biomedical Engineering, 2015, 62, 2055-2061.	4.2	39
96	Block-Toeplitz/Hankel Structured Total Least Squares. SIAM Journal on Matrix Analysis and Applications, 2005, 26, 1083-1099.	1.4	38
97	Artefact detection and quality assessment of ambulatory ECG signals. Computer Methods and Programs in Biomedicine, 2019, 182, 105050.	4.7	38
98	Fast algorithm for solving the Hankel/Toeplitz Structured Total Least Squares problem. Numerical Algorithms, 2000, 23, 371-392.	1.9	37
99	Ultrasound assessment of endometrial thickness and endometrial polyps in women on hormonal replacement therapy. American Journal of Obstetrics and Gynecology, 2003, 188, 1249-1253.	1.3	37
100	Quantitative autism traits in first degree relatives: evidence for the broader autism phenotype in fathers, but not in mothers and siblings. Autism, 2012, 16, 247-260.	4.1	37
101	Multi-structural Signal Recovery for Biomedical Compressive Sensing. IEEE Transactions on Biomedical Engineering, 2013, 60, 2794-2805.	4.2	37
102	Tensor decompositions and data fusion in epileptic electroencephalography and functional magnetic resonance imaging data. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2017, 7, e1197.	6.8	37
103	Ictal autonomic changes as a tool for seizure detection: a systematic review. Clinical Autonomic Research, 2019, 29, 161-181.	2.5	37
104	A fast algorithm for subspace state-space system identification via exploitation of the displacement structure. Journal of Computational and Applied Mathematics, 2001, 132, 71-81.	2.0	36
105	Common pole estimation in multi-channel exponential data modeling. Signal Processing, 2006, 86, 846-858.	3.7	36
106	Detection of endometrial pathology using saline infusion sonography versus gel instillation sonography: a prospective cohort study. Fertility and Sterility, 2011, 95, 285-288.	1.0	36
107	Hierarchical nonâ€negative matrix factorization (hNMF): a tissue pattern differentiation method for glioblastoma multiforme diagnosis using MRSI. NMR in Biomedicine, 2013, 26, 307-319.	2.8	36
108	Measuring Near-Infrared Spectroscopy Derived Cerebral Autoregulation in Neonates: From Research Tool Toward Bedside Multimodal Monitoring. Frontiers in Pediatrics, 2018, 6, 117.	1.9	36

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109	A Machine-Learning Approach for Detection and Quantification of QRS Fragmentation. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1980-1989.	6.3	36
110	Consistent estimation in an implicit quadratic measurement error model. Computational Statistics and Data Analysis, 2004, 47, 123-147.	1.2	35
111	Cardiorespiratory Information Dynamics during Mental Arithmetic and Sustained Attention. PLoS ONE, 2015, 10, e0129112.	2.5	34
112	Two-level ℓ_1 minimization for compressed sensing. Signal Processing, 2015, 108, 459-475.	3.7	34
113	Semi-automated brain tumor segmentation on multi-parametric MRI using regularized non-negative matrix factorization. BMC Medical Imaging, 2017, 17, 29.	2.7	34
114	Unconstrained Estimation of HRV Indices After Removing Respiratory Influences From Heart Rate. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 2386-2397.	6.3	34
115	Perceptual audio modeling with exponentially damped sinusoids. Signal Processing, 2005, 85, 163-176.	3.7	32
116	The use of serum inhibin A and activin A levels in predicting the outcome of 'pregnancies of unknown location'. Human Reproduction, 2009, 24, 2451-2456.	0.9	32
117	A Novel Approach to Predict the Likelihood of Specific Ovarian Tumor Pathology Based on Serum CA-125: A Multicenter Observational Study. Cancer Epidemiology Biomarkers and Prevention, 2011, 20, 2420-2428.	2.5	32
118	Two Time Point MS Lesion Segmentation in Brain MRI: An Expectation-Maximization Framework. Frontiers in Neuroscience, 2016, 10, 576.	2.8	32
119	Early development of synchrony in cortical activations in the human. Neuroscience, 2016, 322, 298-307.	2.3	32
120	Autonomic effects of refractory epilepsy on heart rate variability in children: influence of intermittent vagus nerve stimulation. Developmental Medicine and Child Neurology, 2011, 53, 1143-1149.	2.1	31
121	Ectopic pregnancy: using the hCG ratio to select women for expectant or medical management. Acta Obstetricia Et Gynecologica Scandinavica, 2011, 90, 264-272.	2.8	31
122	The dynamics of contour integration: A simultaneous EEG–fMRI study. NeuroImage, 2014, 88, 10-21.	4.2	31
123	An efficient and reliable algorithm for computing the singular subspace of a matrix, associated with its smallest singular values. Journal of Computational and Applied Mathematics, 1987, 19, 313-330.	2.0	30
124	Explaining Support Vector Machines: A Color Based Nomogram. PLoS ONE, 2016, 11, e0164568.	2.5	30
125	The hCG ratio can predict the ultimate viability of the intrauterine pregnancies of uncertain viability in the pregnancy of unknown location population. Human Reproduction, 2008, 23, 1964-1967.	0.9	29
126	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. NMR in Biomedicine, 2015, 28, 1599-1624.	2.8	29

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127	Objective differentiation of neonatal EEG background grades using detrended fluctuation analysis. Frontiers in Human Neuroscience, 2015, 9, 189.	2.0	29
128	Improved multi-stage neonatal seizure detection using a heuristic classifier and a data-driven post-processor. Clinical Neurophysiology, 2016, 127, 3014-3024.	1.5	29
129	Dynamic Cerebral Autoregulation Reproducibility Is Affected by Physiological Variability. Frontiers in Physiology, 2019, 10, 865.	2.8	29
130	Evaluation of a Commercial Ballistocardiography Sensor for Sleep Apnea Screening and Sleep Monitoring. Sensors, 2019, 19, 2133.	3.8	29
131	R-DECO: an open-source Matlab based graphical user interface for the detection and correction of R-peaks. PeerJ Computer Science, 2019, 5, e226.	4.5	29
132	An efficient Total Least Squares algorithm based on a rank-revealing two-sided orthogonal decomposition. Numerical Algorithms, 1993, 4, 101-133.	1.9	28
133	Bagging Linear Sparse Bayesian Learning Models for Variable Selection in Cancer Diagnosis. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 338-347.	3.2	28
134	Reproducibility of dynamic cerebral autoregulation parameters: a multi-centre, multi-method study. Physiological Measurement, 2018, 39, 125002.	2.1	28
135	High-performance numerical algorithms and software for structured total least squares. Journal of Computational and Applied Mathematics, 2005, 180, 311-331.	2.0	27
136	The Total Least Squares Problem in AX≈B: A New Classification with the Relationship to the Classical Works. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 748-770.	1.4	27
137	A Mathematical Model for Interpretable Clinical Decision Support with Applications in Gynecology. PLoS ONE, 2012, 7, e34312.	2.5	27
138	A mixed effects least squares support vector machine model for classification of longitudinal data. Computational Statistics and Data Analysis, 2012, 56, 611-628.	1.2	27
139	Interhemispheric synchrony in the neonatal EEG revisited: activation synchrony index as a promising classifier. Frontiers in Human Neuroscience, 2014, 8, 1030.	2.0	27
140	Patch-Based Super-Resolution of MR Spectroscopic Images: Application to Multiple Sclerosis. Frontiers in Neuroscience, 2017, 11, 13.	2.8	27
141	Personalizing Heart Rate-Based Seizure Detection Using Supervised SVM Transfer Learning. Frontiers in Neurology, 2020, 11, 145.	2.4	27
142	The power of ECG in multimodal patient–specific seizure monitoring: Added value to an EEG–based detector using limited channels. Epilepsia, 2021, 62, 2333-2343.	5.1	27
143	The partial total least squares algorithm. Journal of Computational and Applied Mathematics, 1988, 21, 333-341.	2.0	26
144	Separable nonlinear least squares fitting with linear bound constraints and its application in magnetic resonance spectroscopy data quantification. Journal of Computational and Applied Mathematics, 2007, 203, 264-278.	2.0	26

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145	Detection of nocturnal frontal lobe seizures in pediatric patients by means of accelerometers: A first study. , 2009, 2009, 6608-11.		26
146	Relationship of EEG sources of neonatal seizures to acute perinatal brain lesions seen on MRI: A pilot study. Human Brain Mapping, 2013, 34, 2402-2417.	3.6	26
147	Detecting rare events using extreme value statistics applied to epileptic convulsions in children. Artificial Intelligence in Medicine, 2014, 60, 89-96.	6.5	26
148	Pattern discovery in critical alarms originating from neonates under intensive care. Physiological Measurement, 2016, 37, 564-579.	2.1	26
149	Does ignoring clustering in multicenter data influence the performance of prediction models? A simulation study. Statistical Methods in Medical Research, 2018, 27, 1723-1736.	1.5	26
150	Investigation of adipose tissues in Zucker rats using in vivo and ex vivo magnetic resonance spectroscopy. Journal of Lipid Research, 2011, 52, 330-336.	4.2	25
151	A prospective fMRI-based technique for localising the epileptogenic zone in presurgical evaluation of epilepsy. NeuroImage, 2015, 113, 329-339.	4.2	25
152	Can ECG monitoring identify seizures?. Journal of Electrocardiology, 2015, 48, 1069-1074.	0.9	25
153	Determination of dominant simulated spindle frequency with different methods. Journal of Neuroscience Methods, 2006, 156, 275-283.	2.5	24
154	Detection of cerebral autoregulation by near-infrared spectroscopy in neonates: performance analysis of measurement methods. Journal of Biomedical Optics, 2012, 17, 117003.	2.6	24
155	Motor cortex metabolite alterations in amyotrophic lateral sclerosis assessed in vivo using edited and non-edited magnetic resonance spectroscopy. Brain Research, 2019, 1718, 22-31.	2.2	24
156	Impaired Cerebral Autoregulation Using Near-Infrared Spectroscopy and Its Relation to Clinical Outcomes in Premature Infants. Advances in Experimental Medicine and Biology, 2011, 701, 233-239.	1.6	24
157	Separation of Respiratory Influences from the Tachogram: A Methodological Evaluation. PLoS ONE, 2014, 9, e101713.	2.5	24
158	ICA Extracts Epileptic Sources from fMRI in EEG-Negative Patients: A Retrospective Validation Study. PLoS ONE, 2013, 8, e78796.	2.5	23
159	Using Prior Knowledge in SVD-Based Parameter Estimation for Magnetic Resonance Spectroscopyâ€"The ATP Example. IEEE Transactions on Biomedical Engineering, 2004, 51, 1568-1578.	4.2	22
160	Robust artefact detection in long-term ECG recordings based on autocorrelation function similarity and percentile analysis. , 2012, 2012, 3151-4.		22
161	Classifying Glioblastoma Multiforme Follow-Up Progressive vs. Responsive Forms Using Multi-Parametric MRI Features. Frontiers in Neuroscience, 2016, 10, 615.	2.8	22
162	Sensorimotor cortex neurometabolite levels as correlate of motor performance in normal aging: evidence from a 1H-MRS study. NeuroImage, 2019, 202, 116050.	4.2	22

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163	Wearable Monitoring and Interpretable Machine Learning Can Objectively Track Progression in Patients during Cardiac Rehabilitation. Sensors, 2020, 20, 3601.	3.8	22
164	Subspace-based parameter estimation of exponentially damped sinusoids using prior knowledge of frequency and phase. Signal Processing, 1997, 59, 129-136.	3.7	21
165	Bayesian model selection of template forward models for EEG source reconstruction. NeuroImage, 2014, 93, 11-22.	4.2	21
166	Heart beat detection in multimodal data using automatic relevant signal detection. Physiological Measurement, 2015, 36, 1691-1704.	2.1	21
167	On the accuracy of total least squares and least squares techniques in the presence of errors on all data. Automatica, 1989, 25, 765-769.	5.0	20
168	Fast and stable two-way algorithm for diagonal plus semi-separable systems of linear equations. Numerical Linear Algebra With Applications, 2001, 8, 7-12.	1.6	20
169	Modeling common dynamics in multichannel signals with applications to artifact and background removal in EEG recordings. IEEE Transactions on Biomedical Engineering, 2005, 52, 2006-2015.	4.2	20
170	Measurement of the liver tissue oxygenation by near-infrared spectroscopy. Intensive Care Medicine, 2005, 31, 138-141.	8.2	20
171	Unsupervised Nosologic Imaging for Glioma Diagnosis. IEEE Transactions on Biomedical Engineering, 2013, 60, 1760-1763.	4.2	20
172	An advanced MRI and MRSI data fusion scheme for enhancing unsupervised brain tumor differentiation. Computers in Biology and Medicine, 2017, 81, 121-129.	7.0	20
173	Adaptive nocturnal seizure detection using heart rate and low-complexity novelty detection. Seizure: the Journal of the British Epilepsy Association, 2018, 59, 48-53.	2.0	20
174	Automated EEG background analysis to identify neonates with hypoxic-ischemic encephalopathy treated with hypothermia at risk for adverse outcome: A pilot study. Pediatrics and Neonatology, 2019, 60, 50-58.	0.9	20
175	High-performance numerical algorithms and software for subspace-based linear multivariable system identification. Journal of Computational and Applied Mathematics, 2004, 170, 371-397.	2.0	19
176	Fast nosological imaging using canonical correlation analysis of brain data obtained by two€dimensional turbo spectroscopic imaging. NMR in Biomedicine, 2008, 21, 311-321.	2.8	19
177	Lymph Node Ratio Better Predicts Disease-Free Survival in Node-Positive Breast Cancer Than the Number of Positive Lymph Nodes. Journal of Clinical Oncology, 2009, 27, e150-e151.	1.6	19
178	A new and fast approach towards sEMG decomposition. Medical and Biological Engineering and Computing, 2013, 51, 593-605.	2.8	19
179	Interictal cardiorespiratory variability in temporal lobe and absence epilepsy in childhood. Physiological Measurement, 2015, 36, 845-856.	2.1	19
180	T-wave end detection using neural networks and Support Vector Machines. Computers in Biology and Medicine, 2018, 96, 116-127.	7.0	19

#	Article	IF	Citations
181	Cerebral autoregulation and activity after propofol for endotracheal intubation in preterm neonates. Pediatric Research, 2018, 84, 719-725.	2.3	19
182	Cardiorespiratory coupling in preterm infants. Journal of Applied Physiology, 2019, 126, 202-213.	2.5	19
183	Prediction of Neurodevelopment in Infants With Tuberous Sclerosis Complex Using Early EEG Characteristics. Frontiers in Neurology, 2020, 11, 582891.	2.4	19
184	icobrain ms 5.1: Combining unsupervised and supervised approaches for improving the detection of multiple sclerosis lesions. NeuroImage: Clinical, 2021, 31, 102707.	2.7	19
185	Level choice in truncated total least squares. Computational Statistics and Data Analysis, 2007, 52, 1103-1118.	1.2	18
186	Frequency-selective quantitation of short-echo time 1H magnetic resonance spectra. Journal of Magnetic Resonance, 2007, 186, 293-304.	2.1	18
187	Short-term outcome of primary operated early breast cancer by hormone and HER-2 receptors. Breast Cancer Research and Treatment, 2009, 115, 349-358.	2.5	18
188	Total least squares methods. Wiley Interdisciplinary Reviews: Computational Statistics, 2010, 2, 212-217.	3.9	18
189	Long-term accelerometry-triggered video monitoring and detection of tonicâ€"clonic and clonic seizures in a home environment: Pilot study. Epilepsy & Behavior Case Reports, 2016, 5, 66-71.	1.5	18
190	Adaptive heart rate-based epileptic seizure detection using real-time user feedback. Physiological Measurement, 2018, 39, 014005.	2.1	18
191	New Measurements For Assessment Of Impaired Cerebral Autoregulation Using Near-Infrared Spectroscopy. Advances in Experimental Medicine and Biology, 2009, 645, 273-278.	1.6	18
192	Partial singular value decomposition algorithm. Journal of Computational and Applied Mathematics, 1990, 33, 105-112.	2.0	17
193	Efficient implementation of a structured total least squares based speech compression method. Linear Algebra and Its Applications, 2003, 366, 295-315.	0.9	17
194	Exploiting spatial information to estimate metabolite levels in twoâ€dimensional MRSI of heterogeneous brain lesions. NMR in Biomedicine, 2011, 24, 824-835.	2.8	17
195	Holistic approach for automated background EEG assessment in asphyxiated full-term infants. Journal of Neural Engineering, 2014, 11, 066007.	3.5	17
196	Assessment of dynamic cerebral autoregulation in humans: Is reproducibility dependent on blood pressure variability?. PLoS ONE, 2020, 15, e0227651.	2.5	17
197	Cardiovascular autonomic adaptation in lunar and martian gravity during parabolic flight. European Journal of Applied Physiology, 2015, 115, 1205-1218.	2.5	16
198	Flexible fusion of electroencephalography and functional magnetic resonance imaging: Revealing neural-hemodynamic coupling through structured matrix-tensor factorization. , 2017, , .		16

#	Article	IF	Citations
199	Artificial Intelligence Based Patient-Specific Preoperative Planning Algorithm for Total Knee Arthroplasty. Frontiers in Robotics and AI, 2022, 9, 840282.	3.2	16
200	Decimative subspace-based parameter estimation techniques. Signal Processing, 2003, 83, 1025-1033.	3.7	15
201	Regularized semiparametric model identification with application to nuclear magnetic resonance signal quantification with unknown macromolecular base-line. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2006, 68, 383-409.	2.2	15
202	On the conic section fitting problem. Journal of Multivariate Analysis, 2007, 98, 588-624.	1.0	15
203	The suppression curve as a quantitative approach for measuring brain maturation in preterm infants. Clinical Neurophysiology, 2016, 127, 2760-2765.	1.5	15
204	Tensor-based classification of an auditory mobile BCI without a subject-specific calibration phase. Journal of Neural Engineering, 2016, 13, 026005.	3.5	15
205	Feature selection methods for accelerometry-based seizure detection in children. Medical and Biological Engineering and Computing, 2017, 55, 151-165.	2.8	15
206	Inter- and intra-observer variability of visual fragmented QRS scoring in ischemic and non-ischemic cardiomyopathy. Journal of Electrocardiology, 2018, 51, 549-554.	0.9	15
207	Algebraic relationships between classical regression and total least-squares estimation. Linear Algebra and Its Applications, 1987, 93, 149-160.	0.9	14
208	IQML-like algorithms for solving structured total least squares problems: a unified view. Signal Processing, 2001, 81, 1935-1945.	3.7	14
209	Heart rate variability during REM and non-REM sleep in preterm neonates with and without abnormal cardiorespiratory events. Early Human Development, 2009, 85, 665-671.	1.8	14
210	An application of methods for the probabilistic three-class classification of pregnancies of unknown location. Artificial Intelligence in Medicine, 2009, 46, 139-154.	6.5	14
211	Using spatio-temporal interest points (STIP) for myoclonic jerk detection in nocturnal video. , 2012, 2012, 4454-7.		14
212	Ictal and interictal respiratory changes in temporal lobe and absence epilepsy in childhood. Epilepsy Research, 2013, 106, 410-416.	1.6	14
213	Reproducibility of rapid short echo time CSI at 3 tesla for clinical applications. Journal of Magnetic Resonance Imaging, 2013, 37, 445-456.	3.4	14
214	Fusion of electroencephalography and functional magnetic resonance imaging to explore epileptic network activity. , 2016, , .		14
215	A New Framework for the Assessment of Cerebral Hemodynamics Regulation in Neonates Using NIRS. Advances in Experimental Medicine and Biology, 2016, 876, 501-509.	1.6	14
216	Improving Reliability of Monitoring Background EEG Dynamics in Asphyxiated Infants. IEEE Transactions on Biomedical Engineering, 2016, 63, 973-983.	4.2	14

#	Article	IF	Citations
217	Non-invasive assessment of disease progression and neuroprotective effects of dietary coconut oil supplementation in the ALS SOD1G93A mouse model: A 1H-magnetic resonance spectroscopic study. NeuroImage: Clinical, 2018, 20, 1092-1105.	2.7	14
218	Augmenting interictal mapping with neurovascular coupling biomarkers by structured factorization of epileptic EEG and fMRI data. NeuroImage, 2021, 228, 117652.	4.2	14
219	Total Least Squares and Errors- In-Variables Modeling: Bridging the Gap Between Statistics, Computational Mathematics and Engineering. , 2004, , 539-555.		14
220	Efficient reduction algorithms for bordered band matrices. Numerical Linear Algebra With Applications, 1995, 2, 95-113.	1.6	13
221	Bandpass prefiltering for exponential data fitting with known frequency region of interest. Signal Processing, 1996, 48, 135-154.	3.7	13
222	Total least squares and errors-in-variables modeling. Signal Processing, 2007, 87, 2281-2282.	3.7	13
223	Decoupling between fundamental frequency and energy envelope of neonate cries. Early Human Development, 2010, 86, 35-40.	1.8	13
224	Integrated discrimination improvement and probability‐sensitive AUC variants. Statistics in Medicine, 2010, 29, 318-319.	1.6	13
225	Sleep Apnea Hypopnea Syndrome classification in SpO$_2$ signals using wavelet decomposition and phase space reconstruction. , 2017, , .		13
226	Weighted Performance Metrics for Automatic Neonatal Seizure Detection Using Multiscored EEG Data. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1114-1123.	6.3	13
227	Autonomic Dysfunction Increases Cardiovascular Risk in the Presence of Sleep Apnea. Frontiers in Physiology, 2019, 10, 620.	2.8	13
228	Codeine delays gastric emptying through inhibition of gastric motility as assessed with a novel diagnostic intragastric balloon catheter. Neurogastroenterology and Motility, 2020, 32, e13733.	3.0	13
229	A Deep Shared Multi-Scale Inception Network Enables Accurate Neonatal Quiet Sleep Detection With Limited EEG Channels. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1023-1033.	6.3	13
230	Using Biosensors and Digital Biomarkers to Assess Response to Cardiac Rehabilitation: Observational Study. Journal of Medical Internet Research, 2020, 22, e17326.	4.3	13
231	High-Resolution ^{1}H NMR Spectroscopy Discriminates Amniotic Fluid of Fetuses with Congenital Diaphragmatic Hernia from Healthy Controls. Journal of Proteome Research, 2015, 14, 4502-4510.	3.7	12
232	Hierarchical non-negative matrix factorization applied to three-dimensional 3‰T MRSI data for automatic tissue characterization of the prostate. NMR in Biomedicine, 2016, 29, 751-758.	2.8	12
233	Field Potential Oscillations in the Bed Nucleus of the Stria Terminalis Correlate with Compulsion in a Rat Model of Obsessive-Compulsive Disorder. Journal of Neuroscience, 2016, 36, 10050-10059.	3.6	12
234	Model-Based Evaluation of Methods for Respiratory Sinus Arrhythmia Estimation. IEEE Transactions on Biomedical Engineering, 2021, 68, 1882-1893.	4.2	12

#	Article	IF	Citations
235	Heart Rate Variability in Newborns with Hypoxic Brain Injury. Advances in Experimental Medicine and Biology, 2013, 789, 43-48.	1.6	12
236	On the Significance of Nongeneric Total Least Squares Problems. SIAM Journal on Matrix Analysis and Applications, 1992, 13, 20-35.	1.4	11
237	In Situ13C NMR quantification of hepatic glycogen. NMR in Biomedicine, 1993, 6, 371-376.	2.8	11
238	Left vs right representations for solving weighted low-rank approximation problems. Linear Algebra and Its Applications, 2007, 422, 540-552.	0.9	11
239	The value of laparoscopic skills courses. Australian and New Zealand Journal of Obstetrics and Gynaecology, 2009, 49, 312-315.	1.0	11
240	Use of a group concept mapping approach to define learning outcomes for an interdisciplinary module in medicine. Perspectives on Medical Education, 2022, 3, 245-253.	3.5	11
241	Decomposition of Near-Infrared Spectroscopy Signals Using Oblique Subspace Projections: Applications in Brain Hemodynamic Monitoring. Frontiers in Physiology, 2016, 7, 515.	2.8	11
242	Instrumented BASFI (iBASFI) Shows Promising Reliability and Validity in the Assessment of Activity Limitations in Axial Spondyloarthritis. Journal of Rheumatology, 2016, 43, 1532-1540.	2.0	11
243	Using Graph Theory to Assess the Interaction between Cerebral Function, Brain Hemodynamics, and Systemic Variables in Premature Infants. Complexity, 2018, 2018, 1-15.	1.6	11
244	Image Denoising Based on Nonlocal Bayesian Singular Value Thresholding and Stein's Unbiased Risk Estimator. IEEE Transactions on Image Processing, 2019, 28, 4899-4911.	9.8	11
245	Enuretic children have a higher variability in REM sleep when comparing their sleep parameters with nonenuretic control children using a wearable sleep tracker at home. Neurourology and Urodynamics, 2020, 39, 367-375.	1.5	11
246	Classification with a Deferral Option and Low-Trust Filtering for Automated Seizure Detection. Sensors, 2021, 21, 1046.	3.8	11
247	Canonical Correlation Analysis in the Study of Cerebral and Peripheral Haemodynamics Interrelations with Systemic Variables in Neonates Supported on ECMO. Advances in Experimental Medicine and Biology, 2013, 765, 23-29.	1.6	11
248	The successive projection algorithm as an initialization method for brain tumor segmentation using non-negative matrix factorization. PLoS ONE, 2017, 12, e0180268.	2.5	11
249	Early soft and flexible fusion of electroencephalography and functional magnetic resonance imaging via double coupled matrix tensor factorization for multisubject group analysis. Human Brain Mapping, 2022, 43, 1231-1255.	3.6	11
250	On SVD-based and TLS-based high-order Yule-Walker methods of frequency estimation. Signal Processing, 1992, 29, 309-317.	3.7	10
251	10 The total least squares problem. Handbook of Statistics, 1993, 9, 377-408.	0.6	10
252	Tucker compression and local optima. Chemometrics and Intelligent Laboratory Systems, 2011, 106, 57-64.	3.5	10

#	ARTICLE	IF	CITATIONS
253	Cardiac autonomic dysfunction in West syndrome. Epilepsy Research, 2012, 102, 167-172.	1.6	10
254	Simple dichotomous updating methods improved the validity of polytomous prediction models. Journal of Clinical Epidemiology, 2013, 66, 1158-1165.	5.0	10
255	Interrater agreement in visual scoring of neonatal seizures based on majority voting on a web-based system: The Neoguard EEG database. Clinical Neurophysiology, 2017, 128, 1737-1745.	1.5	10
256	The effect of early procedural pain in preterm infants on the maturation of electroencephalogram and heart rate variability. Pain, 2021, 162, 1556-1566.	4.2	10
257	Using Bayesian neural networks with ARD input selection to detect malignant ovarian masses prior to surgery. Neural Computing and Applications, 2008, 17, 489-500.	5.6	9
258	Chlamydia trachomatisinfection in patients attending an Early Pregnancy Unit: Prevalence, symptoms, pregnancy location and viability. Acta Obstetricia Et Gynecologica Scandinavica, 2008, 87, 601-607.	2.8	9
259	Independent Component Analysis (ICA) methods for neonatal EEG artifact extraction: Sensitivity to variation of artifact properties. , 2010, , .		9
260	Automated EEG inter-burst interval detection in neonates with mild to moderate postasphyxial encephalopathy. , 2012, 2012, 17-20.		9
261	Influence of the Maternal Use of Labetalol on the Neurogenic Mechanism for Cerebral Autoregulation Assessed by Means of NIRS. Advances in Experimental Medicine and Biology, 2014, 812, 173-179.	1.6	9
262	Accelerometry-Based Activity Recognition and Assessment in Rheumatic and Musculoskeletal Diseases. Sensors, 2016, 16, 2151.	3.8	9
263	Irregular heartbeat classification using Kronecker Product Equations. , 2017, 2017, 438-441.		9
264	Non-invasive characterization of amyotrophic lateral sclerosis in a hTDP-43A315T mouse model: A PET-MR study. NeuroImage: Clinical, 2020, 27, 102327.	2.7	9
265	Bayesian Nonnegative Matrix Factorization With Dirichlet Process Mixtures. IEEE Transactions on Signal Processing, 2020, 68, 3860-3870.	5.3	9
266	Multilevel Interval Coded Scoring to Assess the Cardiovascular Status of Sleep Apnea Patients Using Oxygen Saturation Markers. IEEE Transactions on Biomedical Engineering, 2020, 67, 2839-2848.	4.2	9
267	Artefact Detection in Impedance Pneumography Signals: A Machine Learning Approach. Sensors, 2021, 21, 2613.	3.8	9
268	Sleep Diagnostics for Home Monitoring of Sleep Apnea Patients. Frontiers in Digital Health, 2021, 3, 685766.	2.8	9
269	Interval Coded Scoring: a toolbox for interpretable scoring systems. PeerJ Computer Science, 2018, 4, e150.	4.5	9
270	The extended classical total least squares algorithm. Journal of Computational and Applied Mathematics, 1989, 25, 111-119.	2.0	8

#	Article	IF	Citations
271	Parallel tri- and bi-diagonalization of bordered bidiagonal matrices. Parallel Computing, 1994, 20, 1107-1128.	2.1	8
272	Two-way bidiagonalization scheme for downdating the singular-value decomposition. Linear Algebra and Its Applications, 1995, 222, 23-39.	0.9	8
273	A generic and extensible automatic classification framework applied to brain tumour diagnosis in HealthAgents. Knowledge Engineering Review, 2011, 26, 283-301.	2.6	8
274	Neuronal activity in the bed nucleus of the stria terminalis in a rat model for obsessive–compulsive disorder. Behavioural Brain Research, 2013, 240, 52-59.	2.2	8
275	Changes in Oxygenation Levels Precede Changes in Amplitude of the EEG in Premature Infants. Advances in Experimental Medicine and Biology, 2016, 923, 143-149.	1.6	8
276	Monitoring Effective Connectivity in the Preterm Brain: A Graph Approach to Study Maturation. Complexity, 2017, 2017, 1-13.	1.6	8
277	SINGLE-CHANNEL EEG CLASSIFICATION BY MULTI-CHANNEL TENSOR SUBSPACE LEARNING AND REGRESSION. , 2018, , .		8
278	Sleep Apnea Detection Using Pulse Photoplethysmography. , 0, , .		8
279	Decomposition of a Multiscale Entropy Tensor for Sleep Stage Identification in Preterm Infants. Entropy, 2019, 21, 936.	2.2	8
280	Benchmarking Transfer Entropy Methods for the Study of Linear and Nonlinear Cardio-Respiratory Interactions. Entropy, 2021, 23, 939.	2.2	8
281	Quantitation of the Concordance Between Cerebral Intravascular Oxygenation and Mean Arterial Blood Pressure for the Detection of Impaired Autoregulation. Advances in Experimental Medicine and Biology, 2003, 510, 403-408.	1.6	8
282	Differentiation between brain metastases and glioblastoma multiforme based on MRI, MRS and MRSI. , 2009, , .		7
283	Automatic detection of T wave alternans using tensor decompositions in multilead ECG signals. Physiological Measurement, 2017, 38, 1513-1528.	2.1	7
284	Unsupervised respiratory signal extraction from ungated cardiac magnetic resonance imaging at rest and during exercise. Physics in Medicine and Biology, 2019, 64, 065001.	3.0	7
285	A Bradycardia-Based Stress Calculator for the Neonatal Intensive Care Unit: A Multisystem Approach. Frontiers in Physiology, 2020, 11, 741.	2.8	7
286	Artificial Neural Network-Based Automatic Detection of Food Intake for Neuromodulation in Treating Obesity and Diabetes. Obesity Surgery, 2020, 30, 2547-2557.	2.1	7
287	Capacitively-coupled ECG and respiration for the unobtrusive detection of sleep apnea. Physiological Measurement, 2021, 42, 024001.	2.1	7
288	Results of quantitative EEG analysis are associated with autism spectrum disorder and development abnormalities in infants with tuberous sclerosis complex. Biomedical Signal Processing and Control, 2021, 68, 102658.	5.7	7

#	Article	IF	Citations
289	Maturation of the Autonomic Nervous System in Premature Infants: Estimating Development Based on Heart-Rate Variability Analysis. Frontiers in Physiology, 2020, 11, 581250.	2.8	7
290	Effect of Maternal use of Labetalol on the Cerebral Autoregulation in Premature Infants. Advances in Experimental Medicine and Biology, 2013, 789, 105-111.	1.6	7
291	Nonlinear Transfer Entropy to Assess the Neurovascular Coupling in Premature Neonates. Advances in Experimental Medicine and Biology, 2020, 1232, 11-17.	1.6	7
292	Automatic frequency alignment and quantitation of single resonances in multiple magnetic resonance spectra via complex principal component analysis. Journal of Magnetic Resonance, 2002, 158, 1-14.	2.1	6
293	Differences in the cerebral hemodynamics regulation mechanisms of premature infants with intra-ventricular hemorrhage assessed by means of phase rectified signal averaging. , 2014, 2014, 4208-11.		6
294	Multiple sparse volumetric priors for distributed EEG source reconstruction. NeuroImage, 2014, 100, 715-724.	4.2	6
295	Tumour Relapse Prediction Using Multiparametric MR Data Recorded during Follow-Up of GBM Patients. BioMed Research International, 2015, 2015, 1-13.	1.9	6
296	Online detection of tonic-clonic seizures in pediatric patients using ECG and low-complexity incremental novelty detection. , 2015, 2015, 5597-600.		6
297	Complexity and Nonlinearities in Cardiorespiratory Signals in Sleep and Sleep Apnea. , 2017, , 503-537.		6
298	ECG Artefact Detection Using Ensemble Decision Trees. , 0, , .		6
299	Kernelized Sparse Bayesian Matrix Factorization. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 391-404.	11.3	6
300	Weighted LS-SVM for function estimation applied to artifact removal in bio-signal processing. , 2010, 2010, 988-91.		5
301	Asymptotic hypothesis test to compare likelihood ratios of multiple diagnostic tests in unpaired designs. Journal of Statistical Planning and Inference, 2011, 141, 3578-3594.	0.6	5
302	Detection of irregular heartbeats using tensors. , 2015, , .		5
303	Multiparametric Non-Negative Matrix Factorization for Longitudinal Variations Detection in White-Matter Fiber Bundles. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 1393-1402.	6.3	5
304	Comparison and combination of electrocardiogram, electromyogram and accelerometry for tonic-clonic seizure detection in children. , 2018, , .		5
305	Semi-automated EEG Enhancement Improves Localization of Ictal Onset Zone With EEG-Correlated fMRI. Frontiers in Neurology, 2019, 10, 805.	2.4	5
306	Nonconvulsive epileptic seizure monitoring with incremental learning. Computers in Biology and Medicine, 2019, 114, 103434.	7.0	5

#	Article	IF	Citations
307	Tensor-Based Method for Residual Water Suppression in ^{1}H Magnetic Resonance Spectroscopic Imaging. IEEE Transactions on Biomedical Engineering, 2019, 66, 584-594.	4.2	5
308	Assessment of the Myogenic and Metabolic Mechanism Influence in Cerebral Autoregulation Using Near-Infrared Spectroscopy. Advances in Experimental Medicine and Biology, 2012, 737, 37-44.	1.6	5
309	Relation Between EEG Activity and Brain Oxygenation in Preterm Neonates. Advances in Experimental Medicine and Biology, 2017, 977, 133-139.	1.6	5
310	Data Augmentation and Transfer Learning for Data Quality Assessment in Respiratory Monitoring. Frontiers in Bioengineering and Biotechnology, 2022, 10, 806761.	4.1	5
311	Temporal Changes in Beat-to-Beat Variability of Repolarization Predict Imminent Nonsustained Ventricular Tachycardia in Patients With Ischemic and Nonischemic Dilated Cardiomyopathy. Journal of the American Heart Association, 0, , .	3.7	5
312	Influence of food intake on the QT and QT/RR relation. Journal of Electrocardiology, 2016, 49, 720-727.	0.9	4
313	Semi-Supervised One-Class Transfer Learning for Heart Rate Based Epileptic Seizure Detection. , 0, , .		4
314	Tensor-based ECG Signal Processing Applied to Atrial Fibrillation Detection. , 2018, , .		4
315	Variational Mode Decomposition Features for Heartbeat Classification. , 0, , .		4
316	Recognition of Physical Activities from a Single Arm-Worn Accelerometer: A Multiway Approach. Informatics, 2018, 5, 20.	3.9	4
317	Linear and Non-linear Quantification of the Respiratory Sinus Arrhythmia Using Support Vector Machines. Frontiers in Physiology, 2021, 12, 623781.	2.8	4
318	Pulse Oximetry Markers for Cardiovascular Disease in Sleep Apnea. , 0, , .		4
319	A class of template splines. Computational Statistics and Data Analysis, 2006, 50, 3486-3499.	1.2	3
320	Acoustic emission monitoring using a polarimetric Single Mode optical fibre sensor. International Journal of Materials and Structural Integrity, 2007, 1, 148.	0.1	3
321	Risk group detection and survival function estimation for interval coded survival methods. Neurocomputing, 2013, 112, 200-210.	5.9	3
322	Development of an open-source smart energy house for K-12 education. , 2013, , .		3
323	Tensor-based detection of T wave alternans using ECG. , 2015, 2015, 6991-4.		3
324	Nonconvulsive epileptic seizures detection using multiway data analysis. , 2017, , .		3

#	Article	IF	Citations
325	Interval Coded Scoring extensions for larger problems. , 2017, , .		3
326	Constrained Tensor Decomposition for Longitudinal Analysis of Diffusion Imaging Data. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1137-1148.	6.3	3
327	Capacitively-Coupled ECG and Respiration for Sleep–Wake Prediction and Risk Detection in Sleep Apnea Patients. Sensors, 2021, 21, 6409.	3.8	3
328	Phase:Rectified Signal Averaging for Automatic Detection of QRS Fragmentation. , 0, , .		3
329	Data Quality Assessment of Capacitively-coupled ECG Signals. , 0, , .		3
330	Functional brain maturation and sleep organisation in neonates with congenital heart disease. European Journal of Paediatric Neurology, 2022, 36, 115-122.	1.6	3
331	Cerebral Oxygenation and Activity During Surgical Repair of Neonates With Congenital Diaphragmatic Hernia: A Center Comparison Analysis. Frontiers in Pediatrics, 2021, 9, 798952.	1.9	3
332	A machine learning algorithm for electrocardiographic fQRS quantification validated on multi-center data. Scientific Reports, 2022, 12, 6783.	3.3	3
333	Comments on ?Confidence Images for MR Spectroscopic Imaging? by Karl Young, Dennis Khetselius, Brian J. Soher, and Andrew A. Maudsley (Magn Reson Med 2000;44:537-545). Magnetic Resonance in Medicine, 2001, 46, 1254-1255.	3.0	2
334	Numerical linear algebra and its applications. Numerical Linear Algebra With Applications, 2005, 12, 683-683.	1.6	2
335	Algorithm for imposing SOBI-type constraints on the CP model. , 2008, , .		2
336	Quantification of in vivo Magnetic Resonance Spectroscopy signals with baseline and lineshape corrections. , 2010, , .		2
337	Uterine and quality of life changes in postmenopausal women with an asymptomatic tamoxifen-thickened endometrium randomized to continuation of tamoxifen or switching to anastrozole. Menopause, 2011, 18, 224-229.	2.0	2
338	ECG-derived respiration for ambulatory monitoring. , 2015, , .		2
339	Neural network approach for T-wave end detection: A comparison of architectures. , 2015, , .		2
340	A tensor-based mutation operator for Neuroevolution of Augmenting Topologies (NEAT). , 2017, , .		2
341	Evaluation of Methods to Characterize the Change of the Respiratory Sinus Arrhythmia with Age in Sleep Apnea Patients. , 2019, 2019, 1588-1591.		2
342	Tensor-based Blind fMRI Source Separation Without the Gaussian Noise Assumption â€" A Î²-Divergence Approach. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
343	Short-Term Exercise Progression of Cardiovascular Patients throughout Cardiac Rehabilitation: An Observational Study. Journal of Clinical Medicine, 2020, 9, 3160.	2.4	2
344	Utility metric for unsupervised feature selection. PeerJ Computer Science, 2021, 7, e477.	4.5	2
345	Automatic quality assessment of capacitively-coupled bioimpedance signals for respiratory activity monitoring. Biomedical Signal Processing and Control, 2021, 68, 102775.	5.7	2
346	Technical aspects of cardiorespiratory estimation using subspace projections and cross entropy. Physiological Measurement, 2021, 42, 115008.	2.1	2
347	Supervised SVM Transfer Learning for Modality-Specific Artefact Detection in ECG. Sensors, 2021, 21, 662.	3.8	2
348	Information Transfer Between Respiration and Heart Rate During Sleep Apnea. , 0, , .		2
349	The Power of Tensor-Based Approaches in Cardiac Applications. Series in Bioengineering, 2020, , 291-323.	0.6	2
350	Controlled Breathing Effect on Respiration Quality Assessment Using Machine Learning Approaches. , 2021, , .		2
351	Partial total least squares algorithm. Journal of Computational and Applied Mathematics, 1990, 33, 113-121.	2.0	1
352	A Lanczosâ€"like reduction of symmetric structured matrices to semiseparable form*. Calcolo, 2005, 42, 227-241.	1.1	1
353	A New Method for Modeling Preoperative Diagnosis of Ovarian Tumors. IEEE Transactions on Biomedical Engineering, 2007, 54, 2064-2072.	4.2	1
354	Evaluation of Imputation Methods in Ovarian Tumor Diagnostic Models Using Generalized Linear Models and Support Vector Machines. Medical Decision Making, 2010, 30, 123-131.	2.4	1
355	Quantifying brain tumor tissue abundance in HRâ€MAS spectra using nonâ€negative blind source separation techniques. Journal of Chemometrics, 2012, 26, 406-415.	1.3	1
356	Activity recognition for physical therapy. , 2016, , .		1
357	Differences in Contraction-Induced Hemodynamics and Surface EMG in Duchenne Muscular Dystrophy. Advances in Experimental Medicine and Biology, 2016, 876, 71-77.	1.6	1
358	Evaluation of a Continuous ECG Quality Indicator Based on the Autocorrelation Function. , 0, , .		1
359	Adaptive Alternating Minimization for Fitting Magnetic Resonance Spectroscopic Imaging Signals. , 2010, , 511-520.		1
360	Classifying ovarian tumors using Bayesian Multi-Layer Perceptrons and Automatic Relevance Determination: A multi-center study. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1

#	Article	IF	Citations
361	Supervised Transfer Learning for Personalized Heart Rate Based Epileptic Seizure Detection. , 0, , .		1
362	Sleep Monitoring in Adults Using Wearables and Unobtrusive Technology. , 2022, , 181-228.		1
363	Interval Coded Scoring Index with Interaction Effects - A Sensitivity Study. , 2016, , .		1
364	One-bit Matrix Compressed Sensing Algorithm for Sparse Matrix Recovery. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 647-650.	0.3	1
365	A Robust Estimation of the Cardiorespiratory Coupling in the Presence of Abnormal Beats. , 0, , .		1
366	Neurocardiovascular coupling in congenital diaphragmatic hernia patients undergoing different types of surgical treatment. European Journal of Anaesthesiology, 2021, Publish Ahead of Print, .	1.7	1
367	Comment on â€œEstimating the parameters of exponentially damped/undamped sinusoids in noise: A non-iterative approach, by Debasis Kundu and Amit Mitraâ€• Signal Processing, 1996, 51, 77-78.	3.7	0
368	Canonical Decomposition of scalp EEG as preprocessing for source localisation. , 2007, , .		0
369	NeuroMath: advanced methods for the estimation of human brain activity and connectivity. Biomedizinische Technik, 2010, 55, 121.	0.8	0
370	ICA Component Selection Based on Sparse Activelet Reconstruction for fMRI Analysis in Refractory Focal Epilepsy. , 2012, , .		0
371	Developing engineering-oriented educational workshops within a student branch. , 2013, , .		0
372	Longitudinal Neuroimaging Analysis Using Non-Negative Matrix Factorization. , 2016, , .		0
373	Inappropriate ICD shocks do not induce pro-arrhythmic electrocardiographic changes in men. Scandinavian Cardiovascular Journal, 2017, 51, 47-52.	1.2	0
374	Removal of Respiratory Influences from Heart Rate During Emotional Stress. , 0, , .		0
375	Risk Assessment of All-Cause Mortality in Patients with an Implantable Cardioverter Defibrillator Using a Novel QRS Fragmentation Score. , 0, , .		0
376	Temporal Beat-to-Beat Variability of Repolarization Changes Predict Non-Sustained Ventricular Tachycardia in Ischemic Heart Disease Patients. , 2018, , .		0
377	Functional form estimation using oblique projection matrices for LS-SVM regression models. PLoS ONE, 2019, 14, e0217967.	2.5	0
378	Gastric accumulation of enteral nutrition reduces pressure changes induced by phasic contractility in an isovolumetric intragastric balloon. Neurogastroenterology and Motility, 2021, 33, e14088.	3.0	0

#	Article	IF	Citations
379	White Matter Fiber-Bundle Analysis Using Non-negative Tensor Factorization. Lecture Notes in Computer Science, 2016, , 650-657.	1.3	0
380	Irregular Heartbeats Detection Using Tensors and Support Vector Machines. , 0, , .		0
381	Respiratory Sinus Arrhythmia in Apnea Patients With Apnea Associated Comorbidities. , 0, , .		0
382	Unsupervised Artefact Detection and Screening Using Emfit Sensor in Patients With Sleep Apnea. , 0, , .		0
383	The Cardiorespiratory Graph in Sleep Apnea and Associated Comorbidities. , 0, , .		0
384	Automatic Artifact Removal of Resting-State fMRI with Deep Neural Networks. , 2021, , .		0
385	Frequency-selective quantification of short-echo time Magnetic Resonance spectra. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
386	Title is missing!. , 2020, 15, e0227651.		0
387	Title is missing!. , 2020, 15, e0227651.		0
388	Title is missing!. , 2020, 15, e0227651.		0
389	Title is missing!. , 2020, 15, e0227651.		0