# Ervin Sejdic

List of Publications by Year
in descending order



| 208 | 5,944 | 109264 | 128225 |
|---|---|---|---|
| papers | citations | 35 h-index | 60 g-index |

| 209 | 209 | 209 | 6037 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Timeâ€“frequency feature representation using energy concentration: An overview of recent advances. , 2009, 19, 153-183. | | 583 |
| 2 | Fractional Fourier transform as a signal processing tool: An overview of recent developments. Signal Processing, 2011, 91, 1351-1369. | 2.1 | 298 |
| 3 | Internet of Medical Things: A Review of Recent Contributions Dealing With Cyber-Physical Systems in Medicine. IEEE Internet of Things Journal, 2018, 5, 3810-3822. | 5.5 | 267 |
| 4 | Association of Dual-Task Gait With Incident Dementia in Mild Cognitive Impairment. JAMA Neurology, 2017, 74, 857. | 4.5 | 263 |
| 5 | A Comprehensive Assessment of Gait Accelerometry Signals in Time, Frequency and Time-Frequency Domains. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 603-612. | 2.7 | 131 |
| 6 | Radiological images and machine learning: Trends, perspectives, and prospects. Computers in Biology and Medicine, 2019, 108, 354-370. | 3.9 | 109 |
| 7 | Machine learning-based prediction of acute coronary syndrome using only the pre-hospital 12-lead electrocardiogram. Nature Communications, 2020, 11, 3966. | 5.8 | 102 |
| 8 | Adaptive Transcutaneous Power Transfer to Implantable Devices: A State of the Art Review. Sensors, 2016, 16, 393. | 2.1 | 97 |
| 9 | Carbon Nanotube Chemiresistor for Wireless pH Sensing. Scientific Reports, 2014, 4, 4468. | 1.6 | 95 |
| 10 | An empirical examination of detrended fluctuation analysis for gait data. Gait and Posture, 2010, 31, 336-340. | 0.6 | 93 |
| 11 | Frequency-based window width optimization for -transform. AEU - International Journal of Electronics and Communications, 2008, 62, 245-250. | 1.7 | 92 |
| 12 | The Effects of Rhythmic Sensory Cues on the Temporal Dynamics of Human Gait. PLoS ONE, 2012, 7, e43104. | 1.1 | 84 |
| 13 | Necessity of noise in physiology and medicine. Computer Methods and Programs in Biomedicine, 2013, 111, 459-470. | 2.6 | 83 |
| 14 | Motor and Cognitive Trajectories Before Dementia: Results from Gait and Brain Study. Journal of the American Geriatrics Society, 2018, 66, 1676-1683. | 1.3 | 82 |
| 15 | Deep Belief Networks for Electroencephalography: A Review of Recent Contributions and Future Outlooks. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 642-652. | 3.9 | 81 |
| 16 | A Window Width Optimized S-Transform. Eurasip Journal on Advances in Signal Processing, 2007, 2008, 1. | 1.0 | 77 |
| 17 | Compressive sensing meets timeâ€“frequency: An overview of recent advances in timeâ€“frequency processing of sparse signals. , 2018, 77, 22-35. | | 75 |
| 18 | Multimedia Signals and Systems. , 2012, , . | | 72 |

| # | Article | IF | Citations |
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| 19 | Adhesion Molecules, Altered Vasoreactivity, and Brain Atrophy in Type 2 Diabetes. Diabetes Care, 2011, 34, 2438-2441. | 4.3 | 69 |
| 20 | A telehealth system for automated diagnosis of asthma and chronical obstructive pulmonary disease. Journal of the American Medical Informatics Association: JAMIA, 2018, 25, 1213-1217. | 2.2 | 67 |
| 21 | Motor Phenotype of Decline in Cognitive Performance among Community-Dwellers without Dementia: Population-Based Study and Meta-Analysis. PLoS ONE, 2014, 9, e99318. | 1.1 | 64 |
| 22 | Quantitative Performance Analysis of Scalogram as Instantaneous Frequency Estimator. IEEE Transactions on Signal Processing, 2008, 56, 3837-3845. | 3.2 | 63 |
| 23 | Measures of dynamic stability: Detecting differences between walking overground and on a compliant surface. Human Movement Science, 2010, 29, 977-986. | 0.6 | 60 |
| 24 | A comparative analysis of DBSCAN, K-means, and quadratic variation algorithms for automatic identification of swallows from swallowing accelerometry signals. Computers in Biology and Medicine, 2015, 59, 10-18. | 3.9 | 58 |
| 25 | Extraction of Stride Events From Gait Accelerometry During Treadmill Walking. IEEE Journal of Translational Engineering in Health and Medicine, 2016, 4, 1-11. | 2.2 | 58 |
| 26 | Dysphagia Screening: Contributions of Cervical Auscultation Signals and Modern Signal-Processing Techniques. IEEE Transactions on Human-Machine Systems, 2015, 45, 465-477. | 2.5 | 56 |
| 27 | Segmentation of Dual-Axis Swallowing Accelerometry Signals in Healthy Subjects With Analysis of Anthropometric Effects on Duration of Swallowing Activities. IEEE Transactions on Biomedical Engineering, 2009, 56, 1090-1097. | 2.5 | 55 |
| 28 | Understanding the Basis of Graph Signal Processing via an Intuitive Example-Driven Approach [Lecture Notes]. IEEE Signal Processing Magazine, 2019, 36, 133-145. | 4.6 | 53 |
| 29 | Effects of liquid stimuli on dual-axis swallowing accelerometry signals in a healthy population. BioMedical Engineering OnLine, 2010, 9, 7. | 1.3 | 52 |
| 30 | New horizons in falls prevention and management for older adults: a global initiative. Age and Ageing, 2021, 50, 1499-1507. | 0.7 | 50 |
| 31 | A comparative analysis of swallowing accelerometry and sounds during saliva swallows. BioMedical Engineering OnLine, 2015, 14, 3. | 1.3 | 49 |
| 32 | A Tutorial on Sparse Signal Reconstruction and Its Applications in Signal Processing. Circuits, Systems, and Signal Processing, 2019, 38, 1206-1263. | 1.2 | 48 |
| 33 | Testing of Anesthesia Machines and Defibrillators in Healthcare Institutions. Journal of Medical Systems, 2017, 41, 133. | 2.2 | 47 |
| 34 | Vertex-Frequency Analysis: A Way to Localize Graph Spectral Components [Lecture Notes]. IEEE Signal Processing Magazine, 2017, 34, 176-182. | 4.6 | 46 |
| 35 | Tetrahydrocannabinol Detection Using Semiconductor-Enriched Single-Walled Carbon Nanotube Chemiresistors. ACS Sensors, 2019, 4, 2084-2093. | 4.0 | 46 |
| 36 | Automatic hyoid bone detection in fluoroscopic images using deep learning. Scientific Reports, 2018, 8, 12310. | 1.6 | 44 |

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| 37 | Instantaneous Frequency Estimation Using the ${m S}$-Transform. IEEE Signal Processing Letters, 2008, 15, 309-312. | 2.1 | 40 |
| 38 | Compressive sampling of swallowing accelerometry signals using time-frequency dictionaries based on modulated discrete prolate spheroidal sequences. Eurasip Journal on Advances in Signal Processing, 2012, 2012, . | 1.0 | 40 |
| 39 | A procedure for denoising dual-axis swallowing accelerometry signals. Physiological Measurement, 2010, 31, N1-N9. | 1.2 | 37 |
| 40 | Noninvasive Detection of Thin-Liquid Aspiration Using Dual-Axis Swallowing Accelerometry. Dysphagia, 2013, 28, 105-112. | 1.0 | 37 |
| 41 | Non-invasive identification of swallows via deep learning in high resolution cervical auscultation recordings. Scientific Reports, 2020, 10, 8704. | 1.6 | 37 |
| 42 | Fault diagnosis in machine tools using selective regional correlation. Mechanical Systems and Signal Processing, 2006, 20, 1221-1238. | 4.4 | 36 |
| 43 | Baseline Characteristics of Dual-Axis Cervical Accelerometry Signals. Annals of Biomedical Engineering, 2010, 38, 1048-1059. | 1.3 | 35 |
| 44 | Wireless Communication in Oil and Gas Wells. Energy Technology, 2014, 2, 996-1005. | 1.8 | 35 |
| 45 | Motor sequence learning-induced neural efficiency in functional brain connectivity. Behavioural Brain Research, 2017, 319, 87-95. | 1.2 | 35 |
| 46 | An Online Swallow Detection Algorithm Based on the Quadratic Variation of Dual-Axis Accelerometry. IEEE Transactions on Signal Processing, 2010, 58, 3352-3359. | 3.2 | 34 |
| 47 | A Brain-Computer Interface Based on Bilateral Transcranial Doppler Ultrasound. PLoS ONE, 2011, 6, e24170. | 1.1 | 34 |
| 48 | Decoding human swallowing via electroencephalography: a state-of-the-art review. Journal of Neural Engineering, 2015, 12, 051001. | 1.8 | 33 |
| 49 | Classification of Penetration--Aspiration Versus Healthy Swallows Using Dual-Axis Swallowing Accelerometry Signals in Dysphagic Subjects. IEEE Transactions on Biomedical Engineering, 2013, 60, 1859-1866. | 2.5 | 31 |
| 50 | Neck sensor-supported hyoid bone movement tracking during swallowing. Royal Society Open Science, 2019, 6, 181982. | 1.1 | 30 |
| 51 | Selective Regional Correlation for Pattern Recognition. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2007, 37, 82-93. | 3.4 | 29 |
| 52 | Classifying smoking urges via machine learning. Computer Methods and Programs in Biomedicine, 2016, 137, 203-213. | 2.6 | 29 |
| 53 | Multi-Disciplinary Challenges in Tissue Modeling for Wireless Electromagnetic Powering: A Review. IEEE Sensors Journal, 2017, 17, 6498-6509. | 2.4 | 29 |
| 54 | Computational Deglutition: Using Signal- and Image-Processing Methods to Understand Swallowing and Associated Disorders [Life Sciences]. IEEE Signal Processing Magazine, 2019, 36, 138-146. | 4.6 | 29 |

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|---|---|---|---|
| 55 | Upper Esophageal Sphincter Opening Segmentation With Convolutional Recurrent Neural Networks in High Resolution Cervical Auscultation. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 493-503. | 3.9 | 29 |
| 56 | Introduction to Graph Signal Processing. Signals and Communication Technology, 2019, , 3-108. | 0.4 | 28 |
| 57 | The effects of head movement on dual-axis cervical accelerometry signals. BMC Research Notes, 2010, 3, 269. | 0.6 | 27 |
| 58 | Menopausal hot flashes and the default mode network. Fertility and Sterility, 2015, 103, 1572-1578.e1. | 0.5 | 27 |
| 59 | A review of Hidden Markov models and Recurrent Neural Networks for event detection and localization in biomedical signals. Information Fusion, 2021, 69, 52-72. | 11.7 | 27 |
| 60 | The effects of increased fluid viscosity on swallowing sounds in healthy adults. BioMedical Engineering OnLine, 2013, 12, 90. | 1.3 | 26 |
| 61 | Rationale, development, and implementation of the Electrocardiographic Methods for the Prehospital Identification of Non-ST Elevation Myocardial Infarction Events (EMPIRE). Journal of Electrocardiology, 2015, 48, 921-926. | 0.4 | 26 |
| 62 | A statistical analysis of cervical auscultation signals from adults with unsafe airway protection. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 7. | 2.4 | 26 |
| 63 | Tissue Variability and Antennas for Power Transfer to Wireless Implantable Medical Devices. IEEE Journal of Translational Engineering in Health and Medicine, 2017, 5, 1-11. | 2.2 | 26 |
| 64 | Dysphagia and its effects on swallowing sounds and vibrations in adults. BioMedical Engineering OnLine, 2018, 17, 69. | 1.3 | 26 |
| 65 | The effect of accelerometer location on the classification of single-site forearm mechanomyograms. BioMedical Engineering OnLine, 2010, 9, 23. | 1.3 | 25 |
| 66 | A Method for Removal of Low Frequency Components Associated with Head Movements from Dual-Axis Swallowing Accelerometry Signals. PLoS ONE, 2012, 7, e33464. | 1.1 | 25 |
| 67 | A comparative analysis of spectral exponent estimation techniques for $1/f^{\hat{}}2$ processes with applications to the analysis of stride interval time series. Journal of Neuroscience Methods, 2014, 222, 118-130. | 1.3 | 25 |
| 68 | Motor imagery of gait: a new way to detect mild cognitive impairment?. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 66. | 2.4 | 25 |
| 69 | Deep learning for classification of normal swallows in adults. Neurocomputing, 2018, 285, 1-9. | 3.5 | 25 |
| 70 | Machine-Learning Identification of the Sensing Descriptors Relevant in Molecular Interactions with Metal Nanoparticle-Decorated Nanotube Field-Effect Transistors. ACS Applied Materials & Interfaces, 2019, 11, 1219-1227. | 4.0 | 25 |
| 71 | Tracking Hyoid Bone Displacement During Swallowing Without Videofluoroscopy Using Machine Learning of Vibratory Signals. Dysphagia, 2021, 36, 259-269. | 1.0 | 25 |
| 72 | Automatic discrimination between safe and unsafe swallowing using a reputation-based classifier. BioMedical Engineering OnLine, 2011, 10, 100. | 1.3 | 24 |

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| 73 | Visualization of Trunk Muscle Synergies During Sitting Perturbations Using Self-Organizing Maps (SOM). IEEE Transactions on Biomedical Engineering, 2012, 59, 2516-2523. | 2.5 | 24 |
| 74 | Detection of Swallow Kinematic Events From Acoustic High-Resolution Cervical Auscultation Signals in Patients With Stroke. Archives of Physical Medicine and Rehabilitation, 2019, 100, 501-508. | 0.5 | 24 |
| 75 | Understanding the effects of pre-processing on extracted signal features from gait accelerometry signals. Computers in Biology and Medicine, 2015, 62, 164-174. | 3.9 | 22 |
| 76 | High-Resolution Cervical Auscultation Signal Features Reflect Vertical and Horizontal Displacements of the Hyoid Bone During Swallowing. IEEE Journal of Translational Engineering in Health and Medicine, 2019, 7, 1-9. | 2.2 | 22 |
| 77 | Breath Acetone Sensing Based on Single-Walled Carbon Nanotubeâ€“Titanium Dioxide Hybrids Enabled by a Custom-Built Dehumidifier. ACS Sensors, 2021, 6, 871-880. | 4.0 | 22 |
| 78 | Quantitative classification of pediatric swallowing through accelerometry. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 34. | 2.4 | 21 |
| 79 | The Association of High Resolution Cervical Auscultation Signal Features With Hyoid Bone Displacement During Swallowing. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1810-1816. | 2.7 | 21 |
| 80 | Anatomical Directional Dissimilarities in Tri-axial Swallowing Accelerometry Signals. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 447-458. | 2.7 | 20 |
| 81 | The Prediction of Risk of Penetrationâ€“Aspiration Via Hyoid Bone Displacement Features. Dysphagia, 2020, 35, 66-72. | 1.0 | 20 |
| 82 | Vertex-frequency graph signal processing: A comprehensive review. , 2020, 107, 102802. | | 20 |
| 83 | Acceleration Gait Measures as Proxies for Motor Skill of Walking: A Narrative Review. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 249-261. | 2.7 | 20 |
| 84 | Common spatial pattern and wavelet decomposition for motor imagery EEG- fTCD brain-computer interface. Journal of Neuroscience Methods, 2019, 320, 98-106. | 1.3 | 19 |
| 85 | Remote and wearable ECG devices with diagnostic abilities in adults: A state-of-the-science scoping review. Heart Rhythm, 2022, 19, 1192-1201. | 0.3 | 19 |
| 86 | Standing balance and strength measurements in older adults living in residential care communities. Aging Clinical and Experimental Research, 2017, 29, 1021-1030. | 1.4 | 18 |
| 87 | Time-Frequency Analysis and Hermite Projection Method Applied to Swallowing Accelerometry Signals. Eurasip Journal on Advances in Signal Processing, 2010, 2010, . | 1.0 | 17 |
| 88 | Asynchronous Representation and Processing of Nonstationary Signals : A Time-Frequency Framework. IEEE Signal Processing Magazine, 2013, 30, 42-52. | 4.6 | 17 |
| 89 | Functional connectivity patterns of normal human swallowing: difference among various viscosity swallows in normal and chin-tuck head positions. Brain Research, 2016, 1652, 158-169. | 1.1 | 17 |
| 90 | A fast algorithm for vertex-frequency representations of signals on graphs. Signal Processing, 2017, 131, 483-491. | 2.1 | 17 |

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| 91 | A Preliminary Investigation of Whether HRCA Signals Can Differentiate Between Swallows from Healthy People and Swallows from People with Neurodegenerative Diseases. Dysphagia, 2021, 36, 635-643. | 1.0 | 17 |
| 92 | Estimation of laryngeal closure duration during swallowing without invasive X-rays. Future Generation Computer Systems, 2021, 115, 610-618. | 4.9 | 17 |
| 93 | A Review of Recurrent Neural Network-Based Methods in Computational Physiology. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 6983-7003. | 7.2 | 17 |
| 94 | Spinal cord injury models in non human primates: Are lesions created by sharp instruments relevant to human injuries?. Medical Hypotheses, 2013, 81, 747-748. | 0.8 | 16 |
| 95 | The Development of a Wireless Implantable Blood Flow Monitor. Plastic and Reconstructive Surgery, 2015, 136, 199-203. | 0.7 | 16 |
| 96 | A comparison between swallowing sounds and vibrations in patients with dysphagia. Computer Methods and Programs in Biomedicine, 2017, 144, 179-187. | 2.6 | 16 |
| 97 | Channel estimation using DPSS based frames. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , . | 1.8 | 15 |
| 98 | Vocalization removal for improved automatic segmentation of dual-axis swallowing accelerometry signals. Medical Engineering and Physics, 2010, 32, 668-672. | 0.8 | 15 |
| 99 | Adapt current tools for handling big data. Nature, 2014, 507, 306-306. | 13.7 | 15 |
| 100 | A Study of Brain Networks Associated with Swallowing Using Graph-Theoretical Approaches. PLoS ONE, 2013, 8, e73577. | 1.1 | 15 |
| 101 | A cardiorespiratory classifier of voluntary and involuntary electrodermal activity. BioMedical Engineering OnLine, 2010, 9, 11. | 1.3 | 14 |
| 102 | Characteristics of Dry Chin-Tuck Swallowing Vibrations and Sounds. IEEE Transactions on Biomedical Engineering, 2015, 62, 2456-2464. | 2.5 | 14 |
| 103 | Analysis of the pen pressure and grip force signal during basic drawing tasks: The timing and speed changes impact drawing characteristics. Computers in Biology and Medicine, 2017, 87, 124-131. | 3.9 | 14 |
| 104 | Local Smoothness of Graph Signals. Mathematical Problems in Engineering, 2019, 2019, 1-14. | 0.6 | 14 |
| 105 | A novel motor imagery hybrid brain computer interface using EEG and functional transcranial Doppler ultrasound. Journal of Neuroscience Methods, 2019, 313, 44-53. | 1.3 | 14 |
| 106 | Non-negative Matrix Factorization Reveals Resting-State Cortical Alpha Network Abnormalities in the First-Episode Schizophrenia Spectrum. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2020, 5, 961-970. | 1.1 | 14 |
| 107 | How Closely do Machine Ratings of Duration of UES Opening During Videofluoroscopy Approximate Clinician Ratings Using Temporal Kinematic Analyses and the MBSImP?. Dysphagia, 2021, 36, 707-718. | 1.0 | 14 |
| 108 | An Analysis of Resting-State Functional Transcranial Doppler Recordings from Middle Cerebral Arteries. PLoS ONE, 2013, 8, e55405. | 1.1 | 14 |

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| 109 | Towards increased data transmission rate for a three-class metabolic brainâ€“computer interface based on transcranial Doppler ultrasound. Neuroscience Letters, 2012, 528, 99-103. | 1.0 | 13 |
| 110 | Comparative analysis of compressive sensing approaches for recovery of missing samples in implantable wireless Doppler device. IET Signal Processing, 2014, 8, 230-238. | 0.9 | 13 |
| 111 | A System for Simple Real-Time Anastomotic Failure Detection and Wireless Blood Flow Monitoring in the Lower Limbs. IEEE Journal of Translational Engineering in Health and Medicine, 2016, 4, 1-15. | 2.2 | 13 |
| 112 | Totally Implantable Wireless Ultrasonic Doppler Blood Flowmeters: Toward Accurate Miniaturized Chronic Monitors. Ultrasound in Medicine and Biology, 2017, 43, 561-578. | 0.7 | 13 |
| 113 | Vertex-Frequency Energy Distributions. IEEE Signal Processing Letters, 2018, 25, 358-362. | 2.1 | 13 |
| 114 | Influence of attention and bolus volume on brain organization during swallowing. Brain Structure and Function, 2018, 223, 955-964. | 1.2 | 13 |
| 115 | A brain-computer interface based on functional transcranial doppler ultrasound using wavelet transform and support vector machines. Journal of Neuroscience Methods, 2018, 293, 174-182. | 1.3 | 13 |
| 116 | Silent Aspiration Detection in High Resolution Cervical Auscultations. , 2019, , . | | 13 |
| 117 | Transfer Learning for a Multimodal Hybrid EEG-fTCD Brainâ€“Computer Interface. , 2019, 3, 1-4. | | 13 |
| 118 | Differences in brain networks during consecutive swallows detected using an optimized vertexâ€“frequency algorithm. Neuroscience, 2017, 344, 113-123. | 1.1 | 12 |
| 119 | High-Resolution Cervical Auscultation and Data Science: New Tools to Address an Old Problem. American Journal of Speech-Language Pathology, 2020, 29, 992-1000. | 0.9 | 12 |
| 120 | An investigation of stride interval stationarity while listening to music or viewing television. Human Movement Science, 2012, 31, 695-706. | 0.6 | 11 |
| 121 | Cognitive tasks during walking affect cerebral blood flow signal features in middle cerebral arteries and their correlation to gait characteristics. Behavioral and Brain Functions, 2015, 11, 29. | 1.4 | 11 |
| 122 | Cognitive tasks and cerebral blood flow through anterior cerebral arteries: a study via functional transcranial Doppler ultrasound recordings. BMC Medical Imaging, 2016, 16, 22. | 1.4 | 11 |
| 123 | Simulating, Modeling, and Sensing Variable Tissues for Wireless Implantable Medical Devices. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3547-3556. | 2.9 | 11 |
| 124 | Mobility of Older Adults: Gait Quality Measures Are Associated With Life-Space Assessment Scores. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, e299-e306. | 1.7 | 11 |
| 125 | S-Transform with Frequency Dependent Kaiser Window. , 2007, , . | | 10 |
| 126 | The effects of listening to music or viewing television on human gait. Computers in Biology and Medicine, 2013, 43, 1497-1501. | 3.9 | 10 |

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| 127 | An analysis of cerebral blood flow from middle cerebral arteries during cognitive tasks via functional transcranial Doppler recordings. Neuroscience Research, 2014, 84, 19-26. | 1.0 | 10 |
| 128 | Towards optimal visual presentation design for hybrid EEGâ€"fTCD brainâ€"computer interfaces. Journal of Neural Engineering, 2018, 15, 056019. | 1.8 | 10 |
| 129 | A Preliminary Study Using Smartphone Accelerometers to Sense Gait Impairments Due to Alcohol Intoxication. Journal of Studies on Alcohol and Drugs, 2020, 81, 505-510. | 0.6 | 10 |
| 130 | Automatic Estimation of Laryngeal Vestibule Closure Duration Using High-Resolution Cervical Auscultation Signals. Perspectives of the ASHA Special Interest Groups, 2020, 5, 1647-1656. | 0.4 | 10 |
| 131 | Extraction of average neck flexion angle during swallowing in neutral and chin-tuck positions. BioMedical Engineering OnLine, 2009, 8, 25. | 1.3 | 9 |
| 132 | An investigation of stride interval stationarity in a paediatric population. Human Movement Science, 2010, 29, 125-136. | 0.6 | 9 |
| 133 | The effect of treadmill walking on the stride interval dynamics of children. Human Movement Science, 2010, 29, 987-998. | 0.6 | 9 |
| 134 | The impact of the internet of Things on implanted medical devices including pacemakers, and ICDs. , 2013, , . | | 9 |
| 135 | An investigation of fMRI time series stationarity during motor sequence learning foot tapping tasks. Journal of Neuroscience Methods, 2014, 227, 75-82. | 1.3 | 9 |
| 136 | A matched dual-tree wavelet denoising for tri-axial swallowing vibrations. Biomedical Signal Processing and Control, 2016, 27, 112-121. | 3.5 | 9 |
| 137 | â€œYou can tell by the way I use my walk.â€•Predicting the presence of cognitive load with gait measurements. BioMedical Engineering OnLine, 2018, 17, 122. | 1.3 | 9 |
| 138 | Reduced Interference Vertex-Frequency Distributions. IEEE Signal Processing Letters, 2018, 25, 1393-1397. | 2.1 | 9 |
| 139 | Innovation and Translation Efforts in Wireless Medical Connectivity, Telemedicine and eMedicine: A Story from the RFID Center of Excellence at the University of Pittsburgh. Annals of Biomedical Engineering, 2013, 41, 1913-1925. | 1.3 | 8 |
| 140 | Baseline characteristics of cervical auscultation signals during various head maneuvers. Computers in Biology and Medicine, 2013, 43, 2014-2020. | 3.9 | 8 |
| 141 | Characterizing functional connectivity patterns during saliva swallows in different head positions. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 61. | 2.4 | 8 |
| 142 | A cerebral blood flow evaluation during cognitive tasks following a cervical spinal cord injury: a case study using transcranial Doppler recordings. Cognitive Neurodynamics, 2015, 9, 615-626. | 2.3 | 8 |
| 143 | Automated Bolus Detection in Videofluoroscopic Images of Swallowing Using Mask-RCNN. , 2020, 2020, 2173-2177. | | 8 |
| 144 | Adaptive segmentation and normalization of breathing acoustic data of subjects with obstructive sleep apnea. , 2009, , . | | 7 |

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| 145 | Understanding the statistical persistence of dual-axis swallowing accelerometry signals. Computers in Biology and Medicine, 2010, 40, 839-844. | 3.9 | 7 |
| 146 | Exploring the complex interactions of baseline patient factors to improve nursing triage of acute coronary syndrome. Research in Nursing and Health, 2020, 43, 356-364. | 0.8 | 7 |
| 147 | Facilitators and barriers to real-life mobility in community-dwelling older adults: a narrative review of accelerometry- and global positioning system-based studies. Aging Clinical and Experimental Research, 2022, 34, 1733-1746. | 1.4 | 7 |
| 148 | Application of Multitaper Analysis to wireless communications problems. , 2008, , . | | 6 |
| 149 | The UHF Gen 2 RFID System for transcutaenous operation for orthopedic implants. , 2013, , . | | 6 |
| 150 | EEG-fTCD hybrid brainâ€“computer interface using template matching and wavelet decomposition. Journal of Neural Engineering, 2019, 16, 036014. | 1.8 | 6 |
| 151 | A generalized equation approach for hyoid bone displacement and penetrationâ€“aspiration scale analysis. SN Applied Sciences, 2021, 3, 1. | 1.5 | 6 |
| 152 | Characterizing Swallows From People With Neurodegenerative Diseases Using High-Resolution Cervical Auscultation Signals and Temporal and Spatial Swallow Kinematic Measurements. Journal of Speech, Language, and Hearing Research, 2021, 64, 3416-3431. | 0.7 | 6 |
| 153 | Automatic annotation of cervical vertebrae in videofluoroscopy images via deep learning. Medical Image Analysis, 2021, 74, 102218. | 7.0 | 6 |
| 154 | Mean Square Error Estimation in Thresholding. IEEE Signal Processing Letters, 2011, 18, 103-106. | 2.1 | 5 |
| 155 | Scaling analysis of baseline dual-axis cervical accelerometry signals. Computer Methods and Programs in Biomedicine, 2011, 103, 113-120. | 2.6 | 5 |
| 156 | Compressive asynchronous decomposition of heart sounds. , 2012, , . | | 5 |
| 157 | Recovering heart sounds from sparse samples. , 2012, , . | | 5 |
| 158 | A scaling exponent-based detector of chaos in oscillatory circuits. Physica D: Nonlinear Phenomena, 2013, 242, 67-73. | 1.3 | 5 |
| 159 | Understanding differences between healthy swallows and penetration-aspiration swallows via compressive sensing of tri-axial swallowing accelerometry signals. , 2014, 9190, 91090M. | | 5 |
| 160 | Correlating Tri-Accelerometer Swallowing Vibrations and Hyoid Bone Movement in Patients With Dysphagia. , 2016, , . | | 5 |
| 161 | Anteriorâ€“posterior distension of maximal upper esophageal sphincter opening is correlated with high-resolution cervical auscultation signal features. Physiological Measurement, 2021, 42, 035002. | 1.2 | 5 |
| 162 | Establishing Reference Values for Temporal Kinematic Swallow Events Across the Lifespan in Healthy Community Dwelling Adults Using High-Resolution Cervical Auscultation. Dysphagia, 2022, 37, 664-675. | 1.0 | 5 |

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| 163 | Improving Non-Invasive Aspiration Detection With Auxiliary Classifier Wasserstein Generative Adversarial Networks. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1263-1272. | 3.9 | 5 |
| 164 | The Effect of a Verbal Cognitive Task on Postural Sway Does Not Persist When the Task Is Over. Sensors, 2021, 21, 8428. | 2.1 | 5 |
| 165 | A new approach for the reassignment of time-frequency representations. , 2009, , . | | 4 |
| 166 | Acceleration-based gait analysis: accelerating mobility assessment in older adults. Aging Health, 2013, 9, 465-467. | 0.3 | 4 |
| 167 | Average wavelet coefficient-based detection of chaos in oscillatory circuits. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 188-201. | 0.5 | 4 |
| 168 | Sparse recovery of time-frequency representations via recurrent neural networks. , 2017, , . | | 4 |
| 169 | Automatic Early-Onset Free Flap Failure Detection for Implantable Biomedical Devices. IEEE Transactions on Biomedical Engineering, 2018, 65, 2290-2297. | 2.5 | 4 |
| 170 | ARTIFICIAL INTELLIGENCE AND DYSPHAGIA: NOVEL SOLUTIONS TO OLD PROBLEMS. Arquivos De Gastroenterologia, 2020, 57, 343-346. | 0.3 | 4 |
| 171 | A Preliminary Investigation of Similarities of High Resolution Cervical Auscultation Signals Between Thin Liquid Barium and Water Swallows. IEEE Journal of Translational Engineering in Health and Medicine, 2022, 10, 1-9. | 2.2 | 4 |
| 172 | Cervical Vertebral Height Approximates Hyoid Displacement in Videofluoroscopic Images of Healthy Adults. Dysphagia, 2022, 37, 1689-1696. | 1.0 | 4 |
| 173 | A brain-controlled 3D sonar scanner. Canadian Conference on Electrical and Computer Engineering, 2008, , . | 0.0 | 3 |
| 174 | A unified approach for the estimation of instantaneous frequency and its derivatives for non-stationary signals analysis. , 2012, , . | | 3 |
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