# Omer T Inan

## List of Publications by Citations



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|---|---|---|---|
| 144 papers | 2,968 citations | 24 h-index | 50 g-index |
| 170 ext. papers | 3,927 ext. citations | 4.1 avg, IF | 5.61 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 144 | Toward Ubiquitous Blood Pressure Monitoring via Pulse Transit Time: Theory and Practice. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 1879-901 | 5 | 437 |
| 143 | Ballistocardiography and seismocardiography: a review of recent advances. *IEEE Journal of Biomedical and Health Informatics*, **2015**, 19, 1414-27 | 7.2 | 363 |
| 142 | Robust neural-network-based classification of premature ventricular contractions using wavelet transform and timing interval features. *IEEE Transactions on Biomedical Engineering*, **2006**, 53, 2507-15 | 5 | 234 |
| 141 | Novel Wearable Seismocardiography and Machine Learning Algorithms Can Assess Clinical Status of Heart Failure Patients. *Circulation: Heart Failure*, **2018**, 11, e004313 | 7.6 | 92 |
| 140 | Ballistocardiogram as Proximal Timing Reference for Pulse Transit Time Measurement: Potential for Cuffless Blood Pressure Monitoring. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 2657-64 | 5 | 82 |
| 139 | Weighing Scale-Based Pulse Transit Time is a Superior Marker of Blood Pressure than Conventional Pulse Arrival Time. *Scientific Reports*, **2016**, 6, 39273 | 4.9 | 77 |
| 138 | Ballistocardiogram: Mechanism and Potential for Unobtrusive Cardiovascular Health Monitoring. *Scientific Reports*, **2016**, 6, 31297 | 4.9 | 74 |
| 137 | Extracting respiratory information from seismocardiogram signals acquired on the chest using a miniature accelerometer. *Physiological Measurement*, **2012**, 33, 1643-60 | 2.9 | 68 |
| 136 | Rapid assessment of cardiac contractility on a home bathroom scale. *IEEE Transactions on Information Technology in Biomedicine*, **2011**, 15, 864-9 | | 68 |
| 135 | Novel Methods for Sensing Acoustical Emissions From the Knee for Wearable Joint Health Assessment. *IEEE Transactions on Biomedical Engineering*, **2016**, 63, 1581-90 | 5 | 61 |
| 134 | A Wearable Patch to Enable Long-Term Monitoring of Environmental, Activity and Hemodynamics Variables. *IEEE Transactions on Biomedical Circuits and Systems*, **2016**, 10, 280-8 | 5.1 | 58 |
| 133 | SeismoWatch: Wearable Cuffless Blood Pressure Monitoring Using Pulse Transit Time **2017**, 1, | | 47 |
| 132 | Quantifying and Reducing Motion Artifacts in Wearable Seismocardiogram Measurements During Walking to Assess Left Ventricular Health. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 1277-1286 | 5 | 46 |
| 131 | Ballistocardiogram-Based Approach to Cuffless Blood Pressure Monitoring: Proof of Concept and Potential Challenges. *IEEE Transactions on Biomedical Engineering*, **2018**, 65, 2384-2391 | 5 | 43 |
| 130 | Wearable Vector Electrical Bioimpedance System to Assess Knee Joint Health. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 2353-2360 | 5 | 40 |
| 129 | Toward continuous, noninvasive assessment of ventricular function and hemodynamics: wearable ballistocardiography. *IEEE Journal of Biomedical and Health Informatics*, **2015**, 19, 1435-42 | 7.2 | 38 |
| 128 | Neuroimaging and Machine Learning for Dementia Diagnosis: Recent Advancements and Future Prospects. *IEEE Reviews in Biomedical Engineering*, **2019**, 12, 19-33 | 6.4 | 37 |

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| 127 | Performance Analysis of Gyroscope and Accelerometer Sensors for Seismocardiography-Based Wearable Pre-Ejection Period Estimation. *IEEE Journal of Biomedical and Health Informatics*, **2019**, 23, 2365-2374 | 7.2 | 32 |
| 126 | Quantifying acute physiological biomarkers of transcutaneous cervical vagal nerve stimulation in the context of psychological stress. *Brain Stimulation*, **2020**, 13, 47-59 | 5.1 | 32 |
| 125 | Wearable ballistocardiogram and seismocardiogram systems for health and performance. *Journal of Applied Physiology*, **2018**, 124, 452-461 | 3.7 | 29 |
| 124 | A Robust System for Longitudinal Knee Joint Edema and Blood Flow Assessment Based on Vector Bioimpedance Measurements. *IEEE Transactions on Biomedical Circuits and Systems*, **2016**, 10, 545-55 | 5.1 | 27 |
| 123 | Novel methods for estimating the ballistocardiogram signal using a simultaneously acquired electrocardiogram. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 5344-47 | 0.9 | 26 |
| 122 | Unobtrusive Estimation of Cardiac Contractility and Stroke Volume Changes Using Ballistocardiogram Measurements on a High Bandwidth Force Plate. *Sensors*, **2016**, 16, | 3.8 | 25 |
| 121 | Acoustical Emission Analysis by Unsupervised Graph Mining: A Novel Biomarker of Knee Health Status. *IEEE Transactions on Biomedical Engineering*, **2018**, 65, 1291-1300 | 5 | 24 |
| 120 | Automatic Detection of Seismocardiogram Sensor Misplacement for Robust Pre-Ejection Period Estimation in Unsupervised Settings. *IEEE Sensors Journal*, **2017**, 17, 3805-3813 | 4 | 23 |
| 119 | Adaptive cancellation of floor vibrations in standing ballistocardiogram measurements using a seismic sensor as a noise reference. *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 722-7 | 5 | 23 |
| 118 | Quantifying the Consistency of Wearable Knee Acoustical Emission Measurements During Complex Motions. *IEEE Journal of Biomedical and Health Informatics*, **2016**, 20, 1265-72 | 7.2 | 22 |
| 117 | Acoustic Emissions as a Non-invasive Biomarker of the Structural Health of the Knee. *Annals of Biomedical Engineering*, **2020**, 48, 225-235 | 4.7 | 22 |
| 116 | Comparison of Different Methods for Estimating Cardiac Timings: A Comprehensive Multimodal Echocardiography Investigation. *Frontiers in Physiology*, **2019**, 10, 1057 | 4.6 | 21 |
| 115 | A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. *IEEE Transactions on Biomedical Circuits and Systems*, **2019**, 13, 608-618 | 5.1 | 21 |
| 114 | A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. *IEEE Transactions on Biomedical Circuits and Systems*, **2019**, 13, 595-607 | 5.1 | 20 |
| 113 | A novel system identification technique for improved wearable hemodynamics assessment. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 1345-54 | 5 | 20 |
| 112 | A Wearable, Multimodal Sensing System to Monitor Knee Joint Health. *IEEE Sensors Journal*, **2020**, 20, 10323-10334 | 4 | 20 |
| 111 | Fusing Near-Infrared Spectroscopy with Wearable Hemodynamic Measurements Improves Classification of Mental Stress. *IEEE Sensors Journal*, **2019**, 19, 8522-8531 | 4 | 20 |
| 110 | Quantifying and Reducing Posture-Dependent Distortion in Ballistocardiogram Measurements. *IEEE Journal of Biomedical and Health Informatics*, **2015**, 19, 1549-56 | 7.2 | 19 |

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| 109 | Conventional pulse transit times as markers of blood pressure changes in humans. *Scientific Reports* , **2020**, 10, 16373 | 4.9 | 19 |
| 108 | Robust Longitudinal Ankle Edema Assessment Using Wearable Bioimpedance Spectroscopy. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 1019-1029 | 5 | 19 |
| 107 | Automatic detection of motion artifacts in the ballistocardiogram measured on a modified bathroom scale. *Medical and Biological Engineering and Computing*, **2011**, 49, 213-20 | 3.1 | 18 |
| 106 | Evaluating the lower-body electromyogram signal acquired from the feet as a noise reference for standing ballistocardiogram measurements. *IEEE Transactions on Information Technology in Biomedicine*, **2010**, 14, 1188-96 | | 18 |
| 105 | Application of Noninvasive Vagal Nerve Stimulation to Stress-Related Psychiatric Disorders. *Journal of Personalized Medicine*, **2020**, 10, | 3.6 | 17 |
| 104 | Non-invasive assessment of cardiac contractility on a weighing scale. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 6773-6 | 0.9 | 16 |
| 103 | Universal Pre-Ejection Period Estimation Using Seismocardiography: Quantifying the Effects of Sensor Placement and Regression Algorithms. *IEEE Sensors Journal*, **2018**, 18, 1665-1674 | 4 | 15 |
| 102 | Non-Contact Sensing of Seismocardiogram Signals Using Microwave Doppler Radar. *IEEE Sensors Journal*, **2018**, 18, 5956-5964 | 4 | 15 |
| 101 | A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. *IEEE Sensors Journal*, **2019**, 19, 9324-9331 | 4 | 15 |
| 100 | Preliminary results from BCG and ECG measurements in the heart failure clinic. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 3780-3 | 0.9 | 15 |
| 99 | Using Knee Acoustical Emissions for Sensing Joint Health in Patients with Juvenile Idiopathic Arthritis: A Pilot Study. *IEEE Sensors Journal*, **2018**, 18, 9128-9136 | 4 | 15 |
| 98 | Wearable ballistocardiography: preliminary methods for mapping surface vibration measurements to whole body forces. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 5172-5 | 0.9 | 14 |
| 97 | A Unified Framework for Quality Indexing and Classification of Seismocardiogram Signals. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1080-1092 | 7.2 | 14 |
| 96 | Wearable Cuff-Less Blood Pressure Estimation at Home via Pulse Transit Time. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1926-1937 | 7.2 | 14 |
| 95 | Quantifying the Effects of Increasing Mechanical Stress on Knee Acoustical Emissions Using Unsupervised Graph Mining. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2018**, 26, 594-601 | 4.8 | 13 |
| 94 | . *IEEE/ASME Transactions on Mechatronics*, **2017**, 22, 2492-2501 | 5.5 | 13 |
| 93 | Non-invasive vagal nerve stimulation decreases brain activity during trauma scripts. *Brain Stimulation*, **2020**, 13, 1333-1348 | 5.1 | 13 |
| 92 | Classification of Decompensated Heart Failure From Clinical and Home Ballistocardiography. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 1303-1313 | 5 | 13 |

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| 91 | Seismocardiography-Based Detection of Cardiac Quiescence. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 2025-32 | 5 | 12 |
| 90 | A Proof-of-Concept System to Analyze Joint Sounds in Real Time for Knee Health Assessment in Uncontrolled Settings. *IEEE Sensors Journal*, **2016**, 16, 2892-2893 | 4 | 12 |
| 89 | Tracking clinical status for heart failure patients using ballistocardiography and electrocardiography signal features. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 5188-91 | 0.9 | 12 |
| 88 | Using Ballistocardiography to Monitor Left Ventricular Function in Heart Failure Patients. *Journal of Cardiac Failure*, **2016**, 22, S45 | 3.3 | 11 |
| 87 | Robust Sensing of Distal Pulse Waveforms on a Modified Weighing Scale for Ubiquitous Pulse Transit Time Measurement. *IEEE Transactions on Biomedical Circuits and Systems*, **2017**, 11, 765-772 | 5.1 | 10 |
| 86 | Transcutaneous cervical vagal nerve stimulation reduces sympathetic responses to stress in posttraumatic stress disorder: A double-blind, randomized, sham controlled trial. *Neurobiology of Stress*, **2020**, 13, 100264 | 7.6 | 10 |
| 85 | Reconfigurable analog classifier for knee-joint rehabilitation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 4784-4787 | 0.9 | 10 |
| 84 | Digital Cardiovascular Biomarker Responses to Transcutaneous Cervical Vagus Nerve Stimulation: State-Space Modeling, Prediction, and Simulation. *JMIR MHealth and UHealth*, **2020**, 8, e20488 | 5.5 | 10 |
| 83 | Wearable Sensors Incorporating Compensatory Reserve Measurement for Advancing Physiological Monitoring in Critically Injured Trauma Patients. *Sensors*, **2020**, 20, | 3.8 | 10 |
| 82 | A Glove-Based Form Factor for Collecting Joint Acoustic Emissions: Design and Validation. *Sensors*, **2019**, 19, | 3.8 | 9 |
| 81 | Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1917-1925 | 7.2 | 9 |
| 80 | High-frequency electrical stimulation of cardiac cells and application to artifact reduction. *IEEE Transactions on Biomedical Engineering*, **2012**, 59, 1381-90 | 5 | 9 |
| 79 | **2015**, | | 9 |
| 78 | A portable system for monitoring the behavioral activity of Drosophila. *Journal of Neuroscience Methods*, **2011**, 202, 45-52 | 3 | 9 |
| 77 | . *IEEE Sensors Journal*, **2020**, 20, 3849-3858 | 4 | 9 |
| 76 | Estimation of Instantaneous Oxygen Uptake During Exercise and Daily Activities Using a Wearable Cardio-Electromechanical and Environmental Sensor. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 634-646 | 7.2 | 9 |
| 75 | Wearable knee health system employing novel physiological biomarkers. *Journal of Applied Physiology*, **2018**, 124, 537-547 | 3.7 | 9 |
| 74 | Wearable Patch-Based Estimation of Oxygen Uptake and Assessment of Clinical Status during Cardiopulmonary Exercise Testing in Patients With Heart Failure. *Journal of Cardiac Failure*, **2020**, 26, 948-958 | 3.3 | 8 |

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| 73 | A Wearable System for Attenuating Essential Tremor Based on Peripheral Nerve Stimulation. *IEEE Journal of Translational Engineering in Health and Medicine*, **2020**, 8, 2000111 | 3 | 8 |
| 72 | A proof-of-concept classifier for acoustic signals from the knee joint on a FPAA **2016**, | | 8 |
| 71 | Comparison of autonomic stress reactivity in young healthy versus aging subjects with heart disease. *PLoS ONE*, **2019**, 14, e0216278 | 3.7 | 7 |
| 70 | Towards robust estimation of systolic time intervals using head-to-foot and dorso-ventral components of sternal acceleration signals **2015**, | | 7 |
| 69 | Timing Considerations for Noninvasive Vagal Nerve Stimulation in Clinical Studies **2019**, 2019, 1061-1070 | 0.7 | 7 |
| 68 | Transcutaneous vagal nerve stimulation blocks stress-induced activation of Interleukin-6 and interferon-□n posttraumatic stress disorder: A double-blind, randomized, sham-controlled trial. *Brain, Behavior, & Immunity - Health*, **2020**, 9, 100138 | 5.1 | 7 |
| 67 | Automated Identification of Persistent Time-Domain Features in Seismocardiogram Signals **2019**, | | 7 |
| 66 | Mitigation of Instrument-Dependent Variability in Ballistocardiogram Morphology: Case Study on Force Plate and Customized Weighing Scale. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 69-78 | 7.2 | 7 |
| 65 | A Globalized Model for Mapping Wearable Seismocardiogram Signals to Whole-Body Ballistocardiogram Signals Based on Deep Learning. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1296-1309 | 7.2 | 7 |
| 64 | A miniaturized video system for monitoring the locomotor activity of walking Drosophila melanogaster in space and terrestrial settings. *IEEE Transactions on Biomedical Engineering*, **2009**, 56, 522-4 | 5 | 6 |
| 63 | Knee Acoustic Emissions as a Digital Biomarker of Disease Status in Juvenile Idiopathic Arthritis. *Frontiers in Digital Health*, **2020**, 2, 571839 | 2.3 | 6 |
| 62 | Enabling the assessment of trauma-induced hemorrhage via smart wearable systems. *Science Advances*, **2020**, 6, eabb1708 | 14.3 | 6 |
| 61 | Vibration Characterization of the Human Knee Joint in Audible Frequencies. *Sensors*, **2020**, 20, | 3.8 | 6 |
| 60 | -Value: A Potential Biomarker for Assessing Knee-Joint Health Using Acoustical Emission Sensing **2018**, 2, | | 6 |
| 59 | Photoplethysmography Fast Upstroke Time Intervals Can Be Useful Features for Cuff-Less Measurement of Blood Pressure Changes in Humans. *IEEE Transactions on Biomedical Engineering*, **2021**, PP, | 5 | 6 |
| 58 | Wearable knee health rehabilitation assessment using acoustical emissions **2017**, | | 5 |
| 57 | A frequency domain analysis of respiratory variations in the seismocardiogram signal. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 6881-4 | 0.9 | 5 |
| 56 | Seismocardiography and Machine Learning Algorithms to Assess Clinical Status of Patients with Heart Failure in Cardiopulmonary Exercise Testing. *Journal of Cardiac Failure*, **2019**, 25, S64-S65 | 3.3 | 4 |

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| 55 | Improving the accuracy of proximal timing detection from ballistocardiogram signals using a high bandwidth force plate **2016**, | | 4 |
| 54 | A Novel Accelerometer Mounting Method for Sensing Performance Improvement in Acoustic Measurements From the Knee. *Journal of Vibration and Acoustics, Transactions of the ASME*, **2021**, 143, 031006 | 1.6 | 4 |
| 53 | The Delineation of Fiducial Points for Non-Contact Radar Seismocardiogram Signals Without Concurrent ECG. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1031-1040 | 7.2 | 4 |
| 52 | Estimating Knee Joint Load Using Acoustic Emissions During Ambulation. *Annals of Biomedical Engineering*, **2021**, 49, 1000-1011 | 4.7 | 4 |
| 51 | Robust Method for Mid-Activity Tracking and Evaluation of Ankle Health Post-Injury. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 1341-1350 | 5 | 4 |
| 50 | . *IEEE Sensors Journal*, **2021**, 21, 20398-20411 | 4 | 4 |
| 49 | Improved Pre-Ejection Period Estimation From Ballistocardiogram and Electrocardiogram Signals by Fusing Multiple Timing Interval Features. *IEEE Sensors Journal*, **2017**, 17, 4172-4180 | 4 | 3 |
| 48 | Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1899-1906 | 7.2 | 3 |
| 47 | Toward Non-Invasive and Automatic Intravenous Infiltration Detection: Evaluation of Bioimpedance and Skin Strain in a Pig Model. *IEEE Journal of Translational Engineering in Health and Medicine*, **2018**, 6, 4100207 | 3 | 3 |
| 46 | Non-invasive, multi-modal sensing of skin stretch and bioimpedance for detecting infiltration during intravenous therapy. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 4755-4758 | 0.9 | 3 |
| 45 | Toward closed-loop transcutaneous vagus nerve stimulation using peripheral cardiovascular physiological biomarkers: A proof-of-concept study **2018**, | | 3 |
| 44 | A novel physiological features-assisted architecture for rapidly distinguishing health problems from hardware Trojan attacks and errors in medical devices **2017**, | | 3 |
| 43 | Quantifying the effects of blood pressure changes on ballistocardiogram signals **2017**, | | 3 |
| 42 | Evaluating the Foot Electromyogram Signal as a Noise Reference for a Bathroom Scale Ballistocardiogram Recorder **2008**, | | 3 |
| 41 | Non-Invasive Wearable Patch Utilizing Seismocardiography for Peri-Operative Use in Surgical Patients. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1572-1582 | 7.2 | 3 |
| 40 | Real-time activity classification in a wearable system prototype for knee health assessment via joint sounds. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 3113-3116 | 0.9 | 3 |
| 39 | Harnessing the Manifold Structure of Cardiomechanical Signals for Physiological Monitoring During Hemorrhage. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 1759-1767 | 5 | 3 |
| 38 | Robust Estimation of Respiratory Variability Uncovers Correlates of Limbic Brain Activity and Transcutaneous Cervical Vagus Nerve Stimulation in the Context of Traumatic Stress. *IEEE Transactions on Biomedical Engineering*, **2021**, PP, | 5 | 3 |

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| 37 | Seismocardiography Can Assess Cardiopulmonary Exercise Test Parameters in Patients with Heart Failure. *Journal of Cardiac Failure*, **2018**, 24, S124-S125 | 3.3 | 3 |
| 36 | Accurate Ballistocardiogram Based Heart Rate Estimation Using an Array of Load Cells in a Hospital Bed. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 3373-3383 | 7.2 | 3 |
| 35 | Reducing the Impact of External Vibrations on Fiducial Point Detection in Seismocardiogram Signals. *IEEE Transactions on Biomedical Engineering*, **2021**, PP, | 5 | 3 |
| 34 | Proof-of-concept energy-efficient and real-time hemodynamic feature extraction from bioimpedance signals using a mixed-signal field programmable analog array **2017**, | | 2 |
| 33 | Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1887-1898 | 7.2 | 2 |
| 32 | VibroCV: a computer vision-based vibroarthrography platform with possible application to Juvenile Idiopathic Arthritis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 4431-4434 | 0.9 | 2 |
| 31 | Sternal vibrations during head-out immersion: A preliminary demonstration of underwater wearable ballistocardiography. *Journal of the Acoustical Society of America*, **2015**, 138, EL342-6 | 2.2 | 2 |
| 30 | Estimation of Changes in Intracardiac Hemodynamics Using Wearable Seismocardiography and Machine Learning in Patients with Heart Failure: A Feasibility Study.. *IEEE Transactions on Biomedical Engineering*, **2022**, PP, | 5 | 2 |
| 29 | Machine learning to extract muscle fascicle length changes from dynamic ultrasound images in real-time. *PLoS ONE*, **2021**, 16, e0246611 | 3.7 | 2 |
| 28 | Detection of Meniscal Tear Effects on Tibial Vibration Using Passive Knee Sound Measurements. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 2241-2250 | 5 | 2 |
| 27 | Change Point Detection in Knee Acoustic Emissions using the Teager Operator: A Preliminary Study in Patients with Juvenile Idiopathic Arthritis **2019**, | | 2 |
| 26 | Fit to Burst: Toward Noninvasive Estimation of Achilles Tendon Load Using Burst Vibrations. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 470-481 | 5 | 2 |
| 25 | Securing Medical Devices Against Hardware Trojan Attacks Through Analog-, Digital-, and Physiological-Based Signatures. *Journal of Hardware and Systems Security*, **2018**, 2, 251-265 | 1.6 | 2 |
| 24 | Quantifying Rheumatoid Arthritis Disease Activity using a Multimodal Sensing Knee Brace. *IEEE Transactions on Biomedical Engineering*, **2022**, 1-1 | 5 | 2 |
| 23 | Assessment of Calibration Models for Cuff-Less Blood Pressure Measurement After One Year of Aging.. *IEEE Transactions on Biomedical Engineering*, **2021**, PP, | 5 | 1 |
| 22 | Transcutaneous Cervical Vagal Nerve Stimulation Reduces Sympathetic Responses to Stress in Posttraumatic Stress Disorder | | 1 |
| 21 | Effect of transcutaneous cervical vagus nerve stimulation on the pituitary adenylate cyclase-activating polypeptide (PACAP) response to stress: A randomized, sham controlled, double blind pilot study. *Comprehensive Psychoneuroendocrinology*, **2020**, 4, 100012 | 1.1 | 1 |
| 20 | Localizing Placement of Cardiomechanical Sensors during Dynamic Periods via Template Matching. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 473-476 | 0.9 | 1 |

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| 19 | Inertial Measurements for Tongue Motion Tracking Based on Magnetic Localization with Orientation Compensation. *IEEE Sensors Journal*, **2021**, 21, 7964-7971 | 4 | 1 |
| 18 | An Interpretable Experimental Data Augmentation Method to Improve Knee Health Classification Using Joint Acoustic Emissions. *Annals of Biomedical Engineering*, **2021**, 49, 2399-2411 | 4.7 | 1 |
| 17 | Quantifying Signal Quality for Joint Acoustic Emissions Using Graph-Based Spectral Embedding. *IEEE Sensors Journal*, **2021**, 21, 13676-13684 | 4 | 1 |
| 16 | Noninvasive Cervical Vagal Nerve Stimulation Alters Brain Activity During Traumatic Stress in Individuals With Posttraumatic Stress Disorder. *Psychosomatic Medicine*, **2021**, 83, 969-977 | 3.7 | 1 |
| 15 | Transcutaneous Cervical Vagus Nerve Stimulation Lengthens Exhalation in the Context of Traumatic Stress **2021**, | | 1 |
| 14 | Enabling Wearable Pulse Transit Time-Based Blood Pressure Estimation for Medically Underserved Areas and Health Equity: Comprehensive Evaluation Study. *JMIR MHealth and UHealth*, **2021**, 9, e27466 | 5.5 | 1 |
| 13 | Unifying the Estimation of Blood Volume Decompensation Status in a Porcine Model of Relative and Absolute Hypovolemia Via Wearable Sensing. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 3351-3360 | 7.2 | 1 |
| 12 | Transcutaneous Cervical Vagal Nerve Stimulation in Patients with Posttraumatic Stress Disorder (PTSD): A Pilot Study of Effects on PTSD Symptoms and Interleukin-6 Response to Stress. *Journal of Affective Disorders Reports*, **2021**, 6, 100190-100190 | 1.4 | 1 |
| 11 | Vibration Stimulation as a Non-Invasive Approach to Monitor the Severity of Meniscus Tears. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2021**, 29, 350-359 | 4.8 | 1 |
| 10 | An Integrated Multimodal Knee Brace Enabling Mid-Activity Tracking for Joint Health Assessment. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 7364-7368 | 0.9 | 0 |
| 9 | Validation of a new impedance cardiography analysis algorithm for clinical classification of stress states.. *Psychophysiology*, **2022**, e14013 | 4.1 | 0 |
| 8 | Acoustic Emissions From Loaded and Unloaded Knees to Assess Joint Health in Patients With Juvenile Idiopathic Arthritis. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 3618-3626 | 7.2 | 0 |
| 7 | Transcutaneous Cervical Vagus Nerve Stimulation Inhibits the Reciprocal of the Pulse Transit Time's Responses to Traumatic Stress in Posttraumatic Stress Disorder. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 1444-1447 | 0.9 | 0 |
| 6 | Physiological closed-loop control in critical care: opportunities for innovations. *Progress in Biomedical Engineering*, **2022**, 4, 033001 | 7.2 | 0 |
| 5 | Noninvasive Multimodal Physiological Sensing Systems: Design, Implementation and Validation **2021**, | | |
| 4 | Use of Ballistocardiography to Monitor Cardiovascular Hemodynamics in Preeclampsia. *Women S Health Reports*, **2021**, 2, 97-105 | 0.5 | |
| 3 | Evaluation of a Wireless Tongue Tracking System on the Identification of Phoneme Landmarks. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 1190-1197 | 5 | |
| 2 | Novel Noninvasive Biosensors and Artificial Intelligence for Optimized Heart Failure Management.. *JACC Basic To Translational Science*, **2022**, 7, 316-318 | 8.7 | |

1 Automatic Subject Identification Using Scale-Based Ballistocardiogram Signals. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2022**, 281-292 0.2