

Omer T Inan

List of Publications by Year in descending order

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163
papers

4,840
citations

172457

29
h-index

118850

62
g-index

170
all docs

170
docs citations

170
times ranked

3258
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward Ubiquitous Blood Pressure Monitoring via Pulse Transit Time: Theory and Practice. IEEE Transactions on Biomedical Engineering, 2015, 62, 1879-1901.	4.2	640
2	Ballistocardiography and Seismocardiography: A Review of Recent Advances. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1414-1427.	6.3	529
3	Robust Neural-Network-Based Classification of Premature Ventricular Contractions Using Wavelet Transform and Timing Interval Features. IEEE Transactions on Biomedical Engineering, 2006, 53, 2507-2515.	4.2	324
4	Novel Wearable Seismocardiography and Machine Learning Algorithms Can Assess Clinical Status of Heart Failure Patients. Circulation: Heart Failure, 2018, 11, e004313.	3.9	136
5	Ballistocardiogram: Mechanism and Potential for Unobtrusive Cardiovascular Health Monitoring. Scientific Reports, 2016, 6, 31297.	3.3	122
6	Ballistocardiogram as Proximal Timing Reference for Pulse Transit Time Measurement: Potential for Cuffless Blood Pressure Monitoring. IEEE Transactions on Biomedical Engineering, 2015, 62, 2657-2664.	4.2	114
7	Weighing Scale-Based Pulse Transit Time is a Superior Marker of Blood Pressure than Conventional Pulse Arrival Time. Scientific Reports, 2016, 6, 39273.	3.3	105
8	Extracting respiratory information from seismocardiogram signals acquired on the chest using a miniature accelerometer. Physiological Measurement, 2012, 33, 1643-1660.	2.1	87
9	Rapid Assessment of Cardiac Contractility on a Home Bathroom Scale. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 864-869.	3.2	80
10	Novel Methods for Sensing Acoustical Emissions From the Knee for Wearable Joint Health Assessment. IEEE Transactions on Biomedical Engineering, 2016, 63, 1581-1590.	4.2	76
11	Neuroimaging and Machine Learning for Dementia Diagnosis: Recent Advancements and Future Prospects. IEEE Reviews in Biomedical Engineering, 2019, 12, 19-33.	18.0	76
12	A Wearable Patch to Enable Long-Term Monitoring of Environmental, Activity and Hemodynamics Variables. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 280-288.	4.0	75
13	Ballistocardiogram-Based Approach to Cuffless Blood Pressure Monitoring: Proof of Concept and Potential Challenges. IEEE Transactions on Biomedical Engineering, 2018, 65, 2384-2391.	4.2	70
14	SeismoWatch. , 2017, 1, 1-16.		63
15	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.	4.2	61
16	Wearable Vector Electrical Bioimpedance System to Assess Knee Joint Health. IEEE Transactions on Biomedical Engineering, 2017, 64, 2353-2360.	4.2	60
17	Quantifying acute physiological biomarkers of transcutaneous cervical vagal nerve stimulation in the context of psychological stress. Brain Stimulation, 2020, 13, 47-59.	1.6	54
18	Wearable Cuff-Less Blood Pressure Estimation at Home via Pulse Transit Time. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1926-1937.	6.3	53

#	ARTICLE	IF	CITATIONS
19	Conventional pulse transit times as markers of blood pressure changes in humans. <i>Scientific Reports</i> , 2020, 10, 16373.	3.3	49
20	Comparison of Different Methods for Estimating Cardiac Timings: A Comprehensive Multimodal Echocardiography Investigation. <i>Frontiers in Physiology</i> , 2019, 10, 1057.	2.8	47
21	A Wearable, Multimodal Sensing System to Monitor Knee Joint Health. <i>IEEE Sensors Journal</i> , 2020, 20, 10323-10334.	4.7	47
22	Toward Continuous, Noninvasive Assessment of Ventricular Function and Hemodynamics: Wearable Ballistocardiography. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015, 19, 1435-1442.	6.3	46
23	Wearable ballistocardiogram and seismocardiogram systems for health and performance. <i>Journal of Applied Physiology</i> , 2018, 124, 452-461.	2.5	45
24	Performance Analysis of Gyroscope and Accelerometer Sensors for Seismocardiography-Based Wearable Pre-Ejection Period Estimation. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019, 23, 2365-2374.	6.3	44
25	Robust Longitudinal Ankle Edema Assessment Using Wearable Bioimpedance Spectroscopy. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 1019-1029.	4.2	37
26	A Robust System for Longitudinal Knee Joint Edema and Blood Flow Assessment Based on Vector Bioimpedance Measurements. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016, 10, 545-555.	4.0	36
27	Application of Noninvasive Vagal Nerve Stimulation to Stress-Related Psychiatric Disorders. <i>Journal of Personalized Medicine</i> , 2020, 10, 119.	2.5	36
28	Unobtrusive Estimation of Cardiac Contractility and Stroke Volume Changes Using Ballistocardiogram Measurements on a High Bandwidth Force Plate. <i>Sensors</i> , 2016, 16, 787.	3.8	34
29	A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019, 13, 595-607.	4.0	34
30	Acoustic Emissions as a Non-invasive Biomarker of the Structural Health of the Knee. <i>Annals of Biomedical Engineering</i> , 2020, 48, 225-235.	2.5	34
31	A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019, 13, 608-618.	4.0	33
32	Acoustical Emission Analysis by Unsupervised Graph Mining: A Novel Biomarker of Knee Health Status. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 1291-1300.	4.2	31
33	Adaptive Cancellation of Floor Vibrations in Standing Ballistocardiogram Measurements Using a Seismic Sensor as a Noise Reference. <i>IEEE Transactions on Biomedical Engineering</i> , 2010, 57, 722-727.	4.2	30
34	Automatic Detection of Seismocardiogram Sensor Misplacement for Robust Pre-Ejection Period Estimation in Unsupervised Settings. <i>IEEE Sensors Journal</i> , 2017, 17, 3805-3813.	4.7	30
35	Classification of Decompensated Heart Failure From Clinical and Home Ballistocardiography. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 1303-1313.	4.2	30
36	Wearable Sensors Incorporating Compensatory Reserve Measurement for Advancing Physiological Monitoring in Critically Injured Trauma Patients. <i>Sensors</i> , 2020, 20, 6413.	3.8	30

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37	Transcutaneous cervical vagal nerve stimulation reduces sympathetic responses to stress in posttraumatic stress disorder: A double-blind, randomized, sham controlled trial. <i>Neurobiology of Stress</i> , 2020, 13, 100264.	4.0	30
38	Photoplethysmography Fast Upstroke Time Intervals Can Be Useful Features for Cuff-Less Measurement of Blood Pressure Changes in Humans. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 53-62.	4.2	30
39	Novel methods for estimating the ballistocardiogram signal using a simultaneously acquired electrocardiogram. , 2009, 2009, 5344-47.		29
40	A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. <i>IEEE Sensors Journal</i> , 2019, 19, 9324-9331.	4.7	29
41	Fusing Near-Infrared Spectroscopy With Wearable Hemodynamic Measurements Improves Classification of Mental Stress. <i>IEEE Sensors Journal</i> , 2019, 19, 8522-8531.	4.7	29
42	A Unified Framework for Quality Indexing and Classification of Seismocardiogram Signals. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1080-1092.	6.3	29
43	Estimation of Instantaneous Oxygen Uptake During Exercise and Daily Activities Using a Wearable Cardio-Electromechanical and Environmental Sensor. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 634-646.	6.3	28
44	Automatic detection of motion artifacts in the ballistocardiogram measured on a modified bathroom scale. <i>Medical and Biological Engineering and Computing</i> , 2011, 49, 213-220.	2.8	26
45	A Novel System Identification Technique for Improved Wearable Hemodynamics Assessment. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 1345-1354.	4.2	26
46	Non-invasive vagal nerve stimulation decreases brain activity during trauma scripts. <i>Brain Stimulation</i> , 2020, 13, 1333-1348.	1.6	26
47	Preliminary results from BCG and ECG measurements in the heart failure clinic. , 2012, 2012, 3780-3.		25
48	Quantifying the Consistency of Wearable Knee Acoustical Emission Measurements During Complex Motions. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2016, 20, 1265-1272.	6.3	25
49	Evaluating the Lower-Body Electromyogram Signal Acquired From the Feet As a Noise Reference for Standing Ballistocardiogram Measurements. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2010, 14, 1188-1196.	3.2	24
50	Enabling the assessment of trauma-induced hemorrhage via smart wearable systems. <i>Science Advances</i> , 2020, 6, eabb1708.	10.3	24
51	Quantifying and Reducing Posture-Dependent Distortion in Ballistocardiogram Measurements. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015, 19, 1549-1556.	6.3	23
52	Using Knee Acoustical Emissions for Sensing Joint Health in Patients With Juvenile Idiopathic Arthritis: A Pilot Study. <i>IEEE Sensors Journal</i> , 2018, 18, 9128-9136.	4.7	23
53	Non-Contact Sensing of Seismocardiogram Signals Using Microwave Doppler Radar. <i>IEEE Sensors Journal</i> , 2018, 18, 5956-5964.	4.7	23
54	A Globalized Model for Mapping Wearable Seismocardiogram Signals to Whole-Body Ballistocardiogram Signals Based on Deep Learning. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1296-1309.	6.3	23

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55	Digital Cardiovascular Biomarker Responses to Transcutaneous Cervical Vagus Nerve Stimulation: State-Space Modeling, Prediction, and Simulation. JMIR MHealth and UHealth, 2020, 8, e20488.	3.7	22
56	Non-invasive assessment of cardiac contractility on a weighing scale. , 2009, 2009, 6773-6.		21
57	Universal Pre-Ejection Period Estimation Using Seismocardiography: Quantifying the Effects of Sensor Placement and Regression Algorithms. IEEE Sensors Journal, 2018, 18, 1665-1674.	4.7	20
58	Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1-1.	6.3	20
59	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, 2022, 69, 849-859.	4.2	20
60	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, 69, 2443-2455.	4.2	20
61	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.	4.9	19
62	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.	1.7	18
63	A Wearable System for Attenuating Essential Tremor Based on Peripheral Nerve Stimulation. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-11.	3.7	18
64	Machine learning to extract muscle fascicle length changes from dynamic ultrasound images in real-time. PLoS ONE, 2021, 16, e0246611.	2.5	18
65	Transcutaneous vagal nerve stimulation blocks stress-induced activation of Interleukin-6 and interferon- γ in posttraumatic stress disorder: A double-blind, randomized, sham-controlled trial. Brain, Behavior, & Immunity - Health, 2020, 9, 100138.	2.5	17
66	Non-Invasive Wearable Patch Utilizing Seismocardiography for Peri-Operative Use in Surgical Patients. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1572-1582.	6.3	17
67	Reducing the Impact of External Vibrations on Fiducial Point Detection in Seismocardiogram Signals. IEEE Transactions on Biomedical Engineering, 2022, 69, 176-185.	4.2	17
68	Wearable ballistocardiography: Preliminary methods for mapping surface vibration measurements to whole body forces. , 2014, 2014, 5172-5.		16
69	Towards Estimation of Tidal Volume and Respiratory Timings via Wearable-Patch-Based Impedance Pneumography in Ambulatory Settings. IEEE Transactions on Biomedical Engineering, 2022, 69, 1909-1919.	4.2	16
70	Enabling Continuous Wearable Reflectance Pulse Oximetry at the Sternum. Biosensors, 2021, 11, 521.	4.7	16
71	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.	4.0	15
72	Instrumented Ankle "Foot Orthosis: Toward a Clinical Assessment Tool for Patient-Specific Optimization of Orthotic Ankle Stiffness. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2492-2501.	5.8	15

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73	Respiratory Rate Estimation Using U-Net-Based Cascaded Framework From Electrocardiogram and Seismocardiogram Signals. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 2481-2492.	6.3	15
74	A frequency domain analysis of respiratory variations in the seismocardiogram signal. , 2013, 2013, 6881-4.		14
75	Tracking clinical status for heart failure patients using ballistocardiography and electrocardiography signal features. , 2014, 2014, 5188-91.		14
76	Seismocardiography-Based Detection of Cardiac Quiescence. IEEE Transactions on Biomedical Engineering, 2015, 62, 2025-2032.	4.2	14
77	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.	4.7	14
78	A Glove-Based Form Factor for Collecting Joint Acoustic Emissions: Design and Validation. Sensors, 2019, 19, 2683.	3.8	14
79	Robust Method for Mid-Activity Tracking and Evaluation of Ankle Health Post-Injury. IEEE Transactions on Biomedical Engineering, 2021, 68, 1341-1350.	4.2	14
80	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.	6.3	14
81	AdaptNet: Human Activity Recognition via Bilateral Domain Adaptation Using Semi-Supervised Deep Translation Networks. IEEE Sensors Journal, 2021, 21, 20398-20411.	4.7	14
82	A Wearable Multimodal Sensing System for Tracking Changes in Pulmonary Fluid Status, Lung Sounds, and Respiratory Markers. Sensors, 2022, 22, 1130.	3.8	14
83	High-Frequency Electrical Stimulation of Cardiac Cells and Application to Artifact Reduction. IEEE Transactions on Biomedical Engineering, 2012, 59, 1381-1390.	4.2	13
84	Comparison of autonomic stress reactivity in young healthy versus aging subjects with heart disease. PLoS ONE, 2019, 14, e0216278.	2.5	13
85	Estimating Knee Joint Load Using Acoustic Emissions During Ambulation. Annals of Biomedical Engineering, 2021, 49, 1000-1011.	2.5	13
86	A novel physiological features-assisted architecture for rapidly distinguishing health problems from hardware Trojan attacks and errors in medical devices. , 2017, , .		12
87	Wearable knee health system employing novel physiological biomarkers. Journal of Applied Physiology, 2018, 124, 537-547.	2.5	12
88	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.	6.3	12
89	Knee Acoustic Emissions as a Digital Biomarker of Disease Status in Juvenile Idiopathic Arthritis. Frontiers in Digital Health, 2020, 2, 571839.	2.8	12
90	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.	6.3	12

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91	Noninvasive Cervical Vagal Nerve Stimulation Alters Brain Activity During Traumatic Stress in Individuals With Posttraumatic Stress Disorder. <i>Psychosomatic Medicine</i> , 2021, 83, 969-977.	2.0	12
92	A portable system for monitoring the behavioral activity of <i>Drosophila</i> . <i>Journal of Neuroscience Methods</i> , 2011, 202, 45-52.	2.5	11
93	Using Ballistocardiography to Monitor Left Ventricular Function in Heart Failure Patients. <i>Journal of Cardiac Failure</i> , 2016, 22, S45.	1.7	11
94	Reconfigurable analog classifier for knee-joint rehabilitation. , 2016, 2016, 4784-4787.		11
95	Toward Non-Invasive and Automatic Intravenous Infiltration Detection: Evaluation of Bioimpedance and Skin Strain in a Pig Model. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2018, 6, 1-7.	3.7	11
96	Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1899-1906.	6.3	11
97	Novel approaches to measure acoustic emissions as biomarkers for joint health assessment. , 2015, , .		10
98	A proof-of-concept classifier for acoustic signals from the knee joint on a FPAA. , 2016, , .		10
99	Automated Identification of Persistent Time-Domain Features in Seismocardiogram Signals. , 2019, , .		10
100	<i>b</i>-Value: A Potential Biomarker for Assessing Knee-Joint Health Using Acoustical Emission Sensing. , 2018, 2, 1-4.		9
101	A Reflective Photoplethysmogram Array and Channel Selection Algorithm for Weighing Scale Based Blood Pressure Measurement. <i>IEEE Sensors Journal</i> , 2020, 20, 3849-3858.	4.7	9
102	Enabling Wearable Pulse Transit Time-Based Blood Pressure Estimation for Medically Underserved Areas and Health Equity: Comprehensive Evaluation Study. <i>JMIR MHealth and UHealth</i> , 2021, 9, e27466.	3.7	9
103	Unifying the Estimation of Blood Volume Decomensation Status in a Porcine Model of Relative and Absolute Hypovolemia Via Wearable Sensing. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 3351-3360.	6.3	9
104	A Novel Accelerometer Mounting Method for Sensing Performance Improvement in Acoustic Measurements From the Knee. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2021, 143, 031006.	1.6	9
105	Towards robust estimation of systolic time intervals using head-to-foot and dorso-ventral components of sternal acceleration signals. , 2015, , .		8
106	Vibration Characterization of the Human Knee Joint in Audible Frequencies. <i>Sensors</i> , 2020, 20, 4138.	3.8	8
107	Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1887-1898.	6.3	8
108	Detection of Meniscal Tear Effects on Tibial Vibration Using Passive Knee Sound Measurements. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 2241-2250.	4.2	8

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109	Timing Considerations for Noninvasive Vagal Nerve Stimulation in Clinical Studies. AMIA ... Annual Symposium proceedings, 2019, 2019, 1061-1070.	0.2	8
110	Wearable Sensors and Machine Learning for Hypovolemia Problems in Occupational, Military and Sports Medicine: Physiological Basis, Hardware and Algorithms. Sensors, 2022, 22, 442.	3.8	8
111	Physiological closed-loop control in critical care: opportunities for innovations. Progress in Biomedical Engineering, 2022, 4, 033001.	4.9	8
112	Quantifying Rheumatoid Arthritis Disease Activity Using a Multimodal Sensing Knee Brace. IEEE Transactions on Biomedical Engineering, 2022, 69, 3772-3783.	4.2	8
113	A Miniaturized Video System for Monitoring the Locomotor Activity of Walking <i>Drosophila Melanogaster</i> in Space and Terrestrial Settings. IEEE Transactions on Biomedical Engineering, 2009, 56, 522-524.	4.2	7
114	A Pilot Study to Assess the Reliability of Sensing Joint Acoustic Emissions of the Wrist. Sensors, 2020, 20, 4240.	3.8	7
115	Impedance Pneumography: Assessment of Dual-Frequency Calibration Approaches. , 2021, , .		7
116	Transcutaneous Cervical Vagus Nerve Stimulation Inhibits the Reciprocal of the Pulse Transit Time's Responses to Traumatic Stress in Posttraumatic Stress Disorder. , 2021, 2021, 1444-1447.		7
117	VibroCV: A computer vision-based vibroarthrography platform with possible application to Juvenile idiopathic arthritis. , 2016, 2016, 4431-4434.		6
118	Improved Pre-Ejection Period Estimation From Ballistocardiogram and Electrocardiogram Signals by Fusing Multiple Timing Interval Features. IEEE Sensors Journal, 2017, 17, 4172-4180.	4.7	6
119	Wearable knee health rehabilitation assessment using acoustical emissions. AIP Conference Proceedings, 2017, , .	0.4	6
120	Securing Medical Devices Against Hardware Trojan Attacks Through Analog-, Digital-, and Physiological-Based Signatures. Journal of Hardware and Systems Security, 2018, 2, 251-265.	1.3	6
121	Toward closed-loop transcutaneous vagus nerve stimulation using peripheral cardiovascular physiological biomarkers: A proof-of-concept study. , 2018, , .		6
122	Fit to Burst: Toward Noninvasive Estimation of Achilles Tendon Load Using Burst Vibrations. IEEE Transactions on Biomedical Engineering, 2021, 68, 470-481.	4.2	6
123	Harnessing the Manifold Structure of Cardiomechanical Signals for Physiological Monitoring During Hemorrhage. IEEE Transactions on Biomedical Engineering, 2021, 68, 1759-1767.	4.2	6
124	Inertial Measurements for Tongue Motion Tracking Based on Magnetic Localization With Orientation Compensation. IEEE Sensors Journal, 2021, 21, 7964-7971.	4.7	6
125	Quantifying Signal Quality for Joint Acoustic Emissions Using Graph-Based Spectral Embedding. IEEE Sensors Journal, 2021, 21, 13676-13684.	4.7	6
126	Transcutaneous Cervical Vagus Nerve Stimulation Lengthens Exhalation in the Context of Traumatic Stress. , 2021, , .		6

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127	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. <i>Journal of Affective Disorders Reports</i> , 2021, 6, 100190.	1.7	6
128	Fittsâ€™ Law Based Performance Metrics to Quantify Tremor in Individuals With Essential Tremor. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2022, 26, 2169-2179.	6.3	6
129	Non-invasive, multi-modal sensing of skin stretch and bioimpedance for detecting infiltration during intravenous therapy. , 2016, 2016, 4755-4758.		5
130	Improving the accuracy of proximal timing detection from ballistocardiogram signals using a high bandwidth force plate. , 2016, , .		5
131	Seismocardiography and Machine Learning Algorithms to Assess Clinical Status of Patients with Heart Failure in Cardiopulmonary Exercise Testing. <i>Journal of Cardiac Failure</i> , 2019, 25, S64-S65.	1.7	5
132	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. <i>Comprehensive Psychoneuroendocrinology</i> , 2020, 4, 100012.	1.7	5
133	Estimation of Tidal Volume Using Load Cells on a Hospital Bed. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2022, 26, 3330-3341.	6.3	5
134	AI-Enabled Advanced Development for Assessing Low Circulating Blood Volume for Emergency Medical Care: Comparison of Compensatory Reserve Machine-Learning Algorithms. <i>Sensors</i> , 2022, 22, 2642.	3.8	5
135	Evaluating the Foot Electromyogram Signal as a Noise Reference for a Bathroom Scale Ballistocardiogram Recorder. , 2008, , .		4
136	Seismocardiography Can Assess Cardiopulmonary Exercise Test Parameters in Patients with Heart Failure. <i>Journal of Cardiac Failure</i> , 2018, 24, S124-S125.	1.7	4
137	Change Point Detection in Knee Acoustic Emissions using the Teager Operator: A Preliminary Study in Patients with Juvenile Idiopathic Arthritis. , 2019, , .		4
138	Acoustic Emissions From Loaded and Unloaded Knees to Assess Joint Health in Patients With Juvenile Idiopathic Arthritis. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 3618-3626.	6.3	4
139	Assessment of Calibration Models for Cuff-Less Blood Pressure Measurement After One Year of Aging. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 2087-2093.	4.2	4
140	An Integrated Multimodal Knee Brace Enabling Mid-Activity Tracking for Joint Health Assessment. , 2021, 2021, 7364-7368.		4
141	Classification of Blood Volume Decomensation State via Machine Learning Analysis of Multi-Modal Wearable-Compatible Physiological Signals. <i>Sensors</i> , 2022, 22, 1336.	3.8	4
142	Real-time activity classification in a wearable system prototype for knee health assessment via joint sounds. , 2016, 2016, 3113-3116.		3
143	Proof-of-concept energy-efficient and real-time hemodynamic feature extraction from bioimpedance signals using a mixed-signal field programmable analog array. , 2017, , .		3
144	Quantifying the effects of blood pressure changes on ballistocardiogram signals. , 2017, , .		3

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145	An Interpretable Experimental Data Augmentation Method to Improve Knee Health Classification Using Joint Acoustic Emissions. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2399-2411.	2.5	3
146	A Feasibility Study on Tribological Origins of Knee Acoustic Emissions. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 1685-1695.	4.2	3
147	Novel Noninvasive Biosensors and Artificial Intelligence for Optimized Heart Failure Management. <i>JACC Basic To Translational Science</i> , 2022, 7, 316-318.	4.1	3
148	Sternal vibrations during head-out immersion: A preliminary demonstration of underwater wearable ballistocardiography. <i>Journal of the Acoustical Society of America</i> , 2015, 138, EL342-EL346.	1.1	2
149	Localizing Placement of Cardiomechanical Sensors during Dynamic Periods via Template Matching. , 2020, 2020, 473-476.		2
150	Evaluation of a Wireless Tongue Tracking System on the Identification of Phoneme Landmarks. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1190-1197.	4.2	2
151	Evaluation of a Head-Tongue Controller for Power Wheelchair Driving by People With Quadriplegia. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 1302-1309.	4.2	2
152	Use of Ballistocardiography to Monitor Cardiovascular Hemodynamics in Preeclampsia. <i>Women S Health Reports</i> , 2021, 2, 97-105.	0.8	2
153	Vibration Stimulation as a Non-Invasive Approach to Monitor the Severity of Meniscus Tears. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 350-359.	4.9	2
154	Quantifying Asymmetry Between Medial and Lateral Compartment Knee Loading Forces Using Acoustic Emissions. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 1541-1551.	4.2	2
155	Analyzing the Effects of Parameters for Tremor Modulation via Phase-Locked Electrical Stimulation on a Peripheral Nerve. <i>Journal of Personalized Medicine</i> , 2022, 12, 76.	2.5	2
156	Validation of a new impedance cardiography analysis algorithm for clinical classification of stress states. <i>Psychophysiology</i> , 2022, 59, e14013.	2.4	2
157	Multi-Modal Local Physiological Sensing at the Intravenous Catheter Insertion Site : Towards Automated IV Infiltration Detection. , 2020, , .		1
158	Temporomandibular Joint Acoustic Emissions in Children With Juvenile Idiopathic Arthritis Differ From Those in Healthy Children. <i>Journal of Oral and Maxillofacial Surgery</i> , 2022, , .	1.2	1
159	A finite element model of knee electrical bioimpedance for facilitating edema quantification. , 2017, , .		0
160	Towards Continuous and Ambulatory Blood Pressure Monitoring: Methods for Efficient Data Acquisition for Pulse Transit Time Estimation. <i>Sensors</i> , 2020, 20, 7106.	3.8	0
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