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	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
2	Evaluation of a Head-Tongue Controller for Power Wheelchair Driving by People With Quadriplegia. IEEE Transactions on Biomedical Engineering, 2022, 69, 1302-1309.	4.2	2
3	Photoplethysmography Fast Upstroke Time Intervals Can Be Useful Features for Cuff-Less Measurement of Blood Pressure Changes in Humans. IEEE Transactions on Biomedical Engineering, 2022, 69, 53-62.	4.2	30
4	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
5	Quantifying Asymmetry Between Medial and Lateral Compartment Knee Loading Forces Using Acoustic Emissions. IEEE Transactions on Biomedical Engineering, 2022, 69, 1541-1551.	4.2	2
6	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
7	Assessment of Calibration Models for Cuff-Less Blood Pressure Measurement After One Year of Aging. IEEE Transactions on Biomedical Engineering, 2022, 69, 2087-2093.	4.2	4
8	A Feasibility Study on Tribological Origins of Knee Acoustic Emissions. IEEE Transactions on Biomedical Engineering, 2022, 69, 1685-1695.	4.2	3
9	Fittsâ€™ Law Based Performance Metrics to Quantify Tremor in Individuals With Essential Tremor. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 2169-2179.	6.3	6
10	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
11	Analyzing the Effects of Parameters for Tremor Modulation via Phase-Locked Electrical Stimulation on a Peripheral Nerve. Journal of Personalized Medicine, 2022, 12, 76.	2.5	2
12	Estimation of Tidal Volume Using Load Cells on a Hospital Bed. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 3330-3341.	6.3	5
13	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
14	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
15	Classification of Blood Volume Decompensation State via Machine Learning Analysis of Multi-Modal Wearable-Compatible Physiological Signals. Sensors, 2022, 22, 1336.	3.8	4
16	A Wearable Multimodal Sensing System for Tracking Changes in Pulmonary Fluid Status, Lung Sounds, and Respiratory Markers. Sensors, 2022, 22, 1130.	3.8	14
17	Validation of a new impedance cardiography analysis algorithm for clinical classification of stress states. Psychophysiology, 2022, 59, e14013.	2.4	2
18	AI-Enabled Advanced Development for Assessing Low Circulating Blood Volume for Emergency Medical Care: Comparison of Compensatory Reserve Machine-Learning Algorithms. Sensors, 2022, 22, 2642.	3.8	5

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19	Novel Noninvasive Biosensors and Artificial Intelligence for Optimized HeartÂFailure Management. JACC Basic To Translational Science, 2022, 7, 316-318.	4.1	3
20	Physiological closed-loop control in critical care: opportunities for innovations. Progress in Biomedical Engineering, 2022, 4, 033001.	4.9	8
21	Quantifying Rheumatoid Arthritis Disease Activity Using a Multimodal Sensing Knee Brace. IEEE Transactions on Biomedical Engineering, 2022, 69, 3772-3783.	4.2	8
22	Temporomandibular Joint Acoustic Emissions in Children With Juvenile Idiopathic Arthritis Differ From Those in Healthy Children. Journal of Oral and Maxillofacial Surgery, 2022, , .	1.2	1
23	Finite Element Modeling of the Infant Heart to Determine the Relationship between Single Ventricle Disease and the Seismocardiogram. , 2022, , .		0
24	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
25	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.	6.3	28
26	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
27	Harnessing the Manifold Structure of Cardiomechanical Signals for Physiological Monitoring During Hemorrhage. IEEE Transactions on Biomedical Engineering, 2021, 68, 1759-1767.	4.2	6
28	Evaluation of a Wireless Tongue Tracking System on the Identification of Phoneme Landmarks. IEEE Transactions on Biomedical Engineering, 2021, 68, 1190-1197.	4.2	2
29	Estimating Knee Joint Load Using Acoustic Emissions During Ambulation. Annals of Biomedical Engineering, 2021, 49, 1000-1011.	2.5	13
30	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
31	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
32	Inertial Measurements for Tongue Motion Tracking Based on Magnetic Localization With Orientation Compensation. IEEE Sensors Journal, 2021, 21, 7964-7971.	4.7	6
33	Use of Ballistocardiography to Monitor Cardiovascular Hemodynamics in Preeclampsia. Women S Health Reports, 2021, 2, 97-105.	0.8	2
34	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
35	Machine learning to extract muscle fascicle length changes from dynamic ultrasound images in real-time. PLoS ONE, 2021, 16, e0246611.	2.5	18
36	An Interpretable Experimental Data Augmentation Method to Improve Knee Health Classification Using Joint Acoustic Emissions. Annals of Biomedical Engineering, 2021, 49, 2399-2411.	2.5	3

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37	Quantifying Signal Quality for Joint Acoustic Emissions Using Graph-Based Spectral Embedding. IEEE Sensors Journal, 2021, 21, 13676-13684.	4.7	6
38	Detection of Meniscal Tear Effects on Tibial Vibration Using Passive Knee Sound Measurements. IEEE Transactions on Biomedical Engineering, 2021, 68, 2241-2250.	4.2	8
39	Impedance Pneumography: Assessment of Dual-Frequency Calibration Approaches. , 2021, , .		7
40	Noninvasive Cervical Vagal Nerve Stimulation Alters Brain Activity During Traumatic Stress in Individuals With Posttraumatic Stress Disorder. Psychosomatic Medicine, 2021, 83, 969-977.	2.0	12
41	Design and Evaluation of a Wrist Wearable Joint Acoustic Emission Monitoring System. , 2021, , .		0
42	Transcutaneous Cervical Vagus Nerve Stimulation Lengthens Exhalation in the Context of Traumatic Stress. , 2021, , .		6
43	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.	3.7	9
44	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.	6.3	4
45	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.	6.3	9
46	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
47	AdaptNet: Human Activity Recognition via Bilateral Domain Adaptation Using Semi-Supervised Deep Translation Networks. IEEE Sensors Journal, 2021, 21, 20398-20411.	4.7	14
48	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.	1.7	6
49	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.	4.9	2
50	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	9
51	Noninvasive Multimodal Physiological Sensing Systems: Design, Implementation and Validation. , 2021, , .		0
52	An Integrated Multimodal Knee Brace Enabling Mid-Activity Tracking for Joint Health Assessment. , 2021, 2021, 7364-7368.		4
53	Enabling Continuous Wearable Reflectance Pulse Oximetry at the Sternum. Biosensors, 2021, 11, 521.	4.7	16
54	Transcutaneous Cervical Vagus Nerve Stimulation Inhibits the Reciprocal of the Pulse Transit Timeâ€™s Responses to Traumatic Stress in Posttraumatic Stress Disorder. , 2021, 2021, 1444-1447.		7

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55	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
56	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
57	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.	6.3	23
58	Robust Longitudinal Ankle Edema Assessment Using Wearable Bioimpedance Spectroscopy. IEEE Transactions on Biomedical Engineering, 2020, 67, 1019-1029.	4.2	37
59	Acoustic Emissions as a Non-invasive Biomarker of the Structural Health of the Knee. Annals of Biomedical Engineering, 2020, 48, 225-235.	2.5	34
60	Classification of Decompensated Heart Failure From Clinical and Home Ballistocardiography. IEEE Transactions on Biomedical Engineering, 2020, 67, 1303-1313.	4.2	30
61	A Unified Framework for Quality Indexing and Classification of Seismocardiogram Signals. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1080-1092.	6.3	29
62	A Reflective Photoplethysmogram Array and Channel Selection Algorithm for Weighing Scale Based Blood Pressure Measurement. IEEE Sensors Journal, 2020, 20, 3849-3858.	4.7	9
63	Wearable Sensors Incorporating Compensatory Reserve Measurement for Advancing Physiological Monitoring in Critically Injured Trauma Patients. Sensors, 2020, 20, 6413.	3.8	30
64	Knee Acoustic Emissions as a Digital Biomarker of Disease Status in Juvenile Idiopathic Arthritis. Frontiers in Digital Health, 2020, 2, 571839.	2.8	12
65	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.	1.7	5
66	Transcutaneous vagal nerve stimulation blocks stress-induced activation of Interleukin-6 and interferon-Î³ in posttraumatic stress disorder: A double-blind, randomized, sham-controlled trial. Brain, Behavior, & Immunity - Health, 2020, 9, 100138.	2.5	17
67	Enabling the assessment of trauma-induced hemorrhage via smart wearable systems. Science Advances, 2020, 6, eabb1708.	10.3	24
68	A Pilot Study to Assess the Reliability of Sensing Joint Acoustic Emissions of the Wrist. Sensors, 2020, 20, 4240.	3.8	7
69	Non-invasive vagal nerve stimulation decreases brain activity during trauma scripts. Brain Stimulation, 2020, 13, 1333-1348.	1.6	26
70	Conventional pulse transit times as markers of blood pressure changes in humans. Scientific Reports, 2020, 10, 16373.	3.3	49
71	Vibration Characterization of the Human Knee Joint in Audible Frequencies. Sensors, 2020, 20, 4138.	3.8	8
72	Application of Noninvasive Vagal Nerve Stimulation to Stress-Related Psychiatric Disorders. Journal of Personalized Medicine, 2020, 10, 119.	2.5	36

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73	Localizing Placement of Cardiomechanical Sensors during Dynamic Periods via Template Matching. , 2020, 2020, 473-476.		2
74	Towards Continuous and Ambulatory Blood Pressure Monitoring: Methods for Efficient Data Acquisition for Pulse Transit Time Estimation. Sensors, 2020, 20, 7106.	3.8	0
75	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.	4.0	30
76	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
77	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
78	Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1887-1898.	6.3	8
79	Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1899-1906.	6.3	11
80	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
81	A Wearable, Multimodal Sensing System to Monitor Knee Joint Health. IEEE Sensors Journal, 2020, 20, 10323-10334.	4.7	47
82	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
83	Multi-Modal Local Physiological Sensing at the Intravenous Catheter Insertion Site : Towards Automated IV Infiltration Detection. , 2020, , .		1
84	A mm-Sized Free-Floating Wirelessly Powered Implantable Optical Stimulation Device. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 608-618.	4.0	33
85	A Deep Neural Network-Based Permanent Magnet Localization for Tongue Tracking. IEEE Sensors Journal, 2019, 19, 9324-9331.	4.7	29
86	Comparison of Different Methods for Estimating Cardiac Timings: A Comprehensive Multimodal Echocardiography Investigation. Frontiers in Physiology, 2019, 10, 1057.	2.8	47
87	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.	1.7	5
88	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.	6.3	44
89	A Glove-Based Form Factor for Collecting Joint Acoustic Emissions: Design and Validation. Sensors, 2019, 19, 2683.	3.8	14
90	Comparison of autonomic stress reactivity in young healthy versus aging subjects with heart disease. PLoS ONE, 2019, 14, e0216278.	2.5	13

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91	A Dual-Band Wireless Power Transmission System for Evaluating mm-Sized Implants. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 595-607.	4.0	34
92	Change Point Detection in Knee Acoustic Emissions using the Teager Operator: A Preliminary Study in Patients with Juvenile Idiopathic Arthritis. , 2019, , .		4
93	Automated Identification of Persistent Time-Domain Features in Seismocardiogram Signals. , 2019, , .		10
94	Neuroimaging and Machine Learning for Dementia Diagnosis: Recent Advancements and Future Prospects. IEEE Reviews in Biomedical Engineering, 2019, 12, 19-33.	18.0	76
95	Fusing Near-Infrared Spectroscopy With Wearable Hemodynamic Measurements Improves Classification of Mental Stress. IEEE Sensors Journal, 2019, 19, 8522-8531.	4.7	29
96	Timing Considerations for Noninvasive Vagal Nerve Stimulation in Clinical Studies. AMIA ... Annual Symposium proceedings, 2019, 2019, 1061-1070.	0.2	8
97	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
98	Acoustical Emission Analysis by Unsupervised Graph Mining: A Novel Biomarker of Knee Health Status. IEEE Transactions on Biomedical Engineering, 2018, 65, 1291-1300.	4.2	31
99	Novel Wearable Seismocardiography and Machine Learning Algorithms Can Assess Clinical Status of Heart Failure Patients. Circulation: Heart Failure, 2018, 11, e004313.	3.9	136
100	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
101	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, 1-7.	3.7	11
102	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
103	Wearable knee health system employing novel physiological biomarkers. Journal of Applied Physiology, 2018, 124, 537-547.	2.5	12
104	Wearable ballistocardiogram and seismocardiogram systems for health and performance. Journal of Applied Physiology, 2018, 124, 452-461.	2.5	45
105	Seismocardiography Can Assess Cardiopulmonary Exercise Test Parameters in Patients with Heart Failure. Journal of Cardiac Failure, 2018, 24, S124-S125.	1.7	4
106	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
107	Using Knee Acoustical Emissions for Sensing Joint Health in Patients With Juvenile Idiopathic Arthritis: A Pilot Study. IEEE Sensors Journal, 2018, 18, 9128-9136.	4.7	23
108	b-Value: A Potential Biomarker for Assessing Knee-Joint Health Using Acoustical Emission Sensing. , 2018, 2, 1-4.		9

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109	Toward closed-loop transcutaneous vagus nerve stimulation using peripheral cardiovascular physiological biomarkers: A proof-of-concept study. , 2018, , .		6
110	Non-Contact Sensing of Seismocardiogram Signals Using Microwave Doppler Radar. IEEE Sensors Journal, 2018, 18, 5956-5964.	4.7	23
111	Proof-of-concept energy-efficient and real-time hemodynamic feature extraction from bioimpedance signals using a mixed-signal field programmable analog array. , 2017, , .		3
112	Automatic Detection of Seismocardiogram Sensor Misplacement for Robust Pre-Ejection Period Estimation in Unsupervised Settings. IEEE Sensors Journal, 2017, 17, 3805-3813.	4.7	30
113	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
114	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
115	Wearable knee health rehabilitation assessment using acoustical emissions. AIP Conference Proceedings, 2017, , .	0.4	6
116	Wearable Vector Electrical Bioimpedance System to Assess Knee Joint Health. IEEE Transactions on Biomedical Engineering, 2017, 64, 2353-2360.	4.2	60
117	SeismoWatch. , 2017, 1, 1-16.		63
118	Instrumented Ankleâ€“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
119	A finite element model of knee electrical bioimpedance for facilitating edema quantification. , 2017, , .		0
120	A novel physiological features-assisted architecture for rapidly distinguishing health problems from hardware Trojan attacks and errors in medical devices. , 2017, , .		12
121	Quantifying the effects of blood pressure changes on ballistocardiogram signals. , 2017, , .		3
122	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
123	Unobtrusive Estimation of Cardiac Contractility and Stroke Volume Changes Using Ballistocardiogram Measurements on a High Bandwidth Force Plate. Sensors, 2016, 16, 787.	3.8	34
124	Quantifying the Consistency of Wearable Knee Acoustical Emission Measurements During Complex Motions. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1265-1272.	6.3	25
125	A proof-of-concept classifier for acoustic signals from the knee joint on a FPAA. , 2016, , .		10
126	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

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127	Real-time activity classification in a wearable system prototype for knee health assessment via joint sounds. , 2016, 2016, 3113-3116.		3
128	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
129	Using Ballistocardiography to Monitor Left Ventricular Function in Heart Failure Patients. Journal of Cardiac Failure, 2016, 22, S45.	1.7	11
130	VibroCV: A computer vision-based vibroarthrography platform with possible application to Juvenile idiopathic arthritis. , 2016, 2016, 4431-4434.		6
131	Non-invasive, multi-modal sensing of skin stretch and bioimpedance for detecting infiltration during intravenous therapy. , 2016, 2016, 4755-4758.		5
132	Ballistocardiogram: Mechanism and Potential for Unobtrusive Cardiovascular Health Monitoring. Scientific Reports, 2016, 6, 31297.	3.3	122
133	Reconfigurable analog classifier for knee-joint rehabilitation. , 2016, 2016, 4784-4787.		11
134	Improving the accuracy of proximal timing detection from ballistocardiogram signals using a high bandwidth force plate. , 2016, , .		5
135	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
136	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
137	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, 545-555.	4.0	36
138	Sternal vibrations during head-out immersion: A preliminary demonstration of underwater wearable ballistocardiography. Journal of the Acoustical Society of America, 2015, 138, EL342-EL346.	1.1	2
139	Novel approaches to measure acoustic emissions as biomarkers for joint health assessment. , 2015, , .		10
140	Towards robust estimation of systolic time intervals using head-to-foot and dorso-ventral components of sternal acceleration signals. , 2015, , .		8
141	Toward Continuous, Noninvasive Assessment of Ventricular Function and Hemodynamics: Wearable Ballistocardiography. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1435-1442.	6.3	46
142	A Novel System Identification Technique for Improved Wearable Hemodynamics Assessment. IEEE Transactions on Biomedical Engineering, 2015, 62, 1345-1354.	4.2	26
143	Toward Ubiquitous Blood Pressure Monitoring via Pulse Transit Time: Theory and Practice. IEEE Transactions on Biomedical Engineering, 2015, 62, 1879-1901.	4.2	640
144	Seismocardiography-Based Detection of Cardiac Quiescence. IEEE Transactions on Biomedical Engineering, 2015, 62, 2025-2032.	4.2	14

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145	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
146	Quantifying and Reducing Posture-Dependent Distortion in Ballistocardiogram Measurements. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1549-1556.	6.3	23
147	Ballistocardiography and Seismocardiography: A Review of Recent Advances. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1414-1427.	6.3	529
148	Tracking clinical status for heart failure patients using ballistocardiography and electrocardiography signal features. , 2014, 2014, 5188-91.		14
149	Wearable ballistocardiography: Preliminary methods for mapping surface vibration measurements to whole body forces. , 2014, 2014, 5172-5.		16
150	A frequency domain analysis of respiratory variations in the seismocardiogram signal. , 2013, 2013, 6881-4.		14
151	Extracting respiratory information from seismocardiogram signals acquired on the chest using a miniature accelerometer. Physiological Measurement, 2012, 33, 1643-1660.	2.1	87
152	Preliminary results from BCG and ECG measurements in the heart failure clinic. , 2012, 2012, 3780-3.		25
153	High-Frequency Electrical Stimulation of Cardiac Cells and Application to Artifact Reduction. IEEE Transactions on Biomedical Engineering, 2012, 59, 1381-1390.	4.2	13
154	A portable system for monitoring the behavioral activity of Drosophila. Journal of Neuroscience Methods, 2011, 202, 45-52.	2.5	11
155	Rapid Assessment of Cardiac Contractility on a Home Bathroom Scale. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 864-869.	3.2	80
156	Automatic detection of motion artifacts in the ballistocardiogram measured on a modified bathroom scale. Medical and Biological Engineering and Computing, 2011, 49, 213-220.	2.8	26
157	Adaptive Cancellation of Floor Vibrations in Standing Ballistocardiogram Measurements Using a Seismic Sensor as a Noise Reference. IEEE Transactions on Biomedical Engineering, 2010, 57, 722-727.	4.2	30
158	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, 1188-1196.	3.2	24
159	Novel methods for estimating the ballistocardiogram signal using a simultaneously acquired electrocardiogram. , 2009, 2009, 5344-47.		29
160	A Miniaturized Video System for Monitoring the Locomotor Activity of WalkingDrosophila Melanogasterin Space and Terrestrial Settings. IEEE Transactions on Biomedical Engineering, 2009, 56, 522-524.	4.2	7
161	Non-invasive assessment of cardiac contractility on a weighing scale. , 2009, 2009, 6773-6.		21
162	Evaluating the Foot Electromyogram Signal as a Noise Reference for a Bathroom Scale Ballistocardiogram Recorder. , 2008, , .		4

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163	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