

# Kouhyar Tavakolian

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11565581/publications.pdf>

Version: 2024-02-01

58  
papers

1,704  
citations

586496

16  
h-index

466096

32  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1477  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Parkinson's Disease on Cardio-postural Coupling During Orthostatic Challenge. <i>Frontiers in Physiology</i> , 2022, 13, .	1.3	3
2	Mechanical deconditioning of the heart due to long-term bed rest as observed on seismocardiogram morphology. <i>Npj Microgravity</i> , 2022, 8, .	1.9	8
3	Detecting Coronary Artery Disease Using Rest Seismocardiography and Gyrocardiography. <i>Frontiers in Physiology</i> , 2021, 12, 758727.	1.3	4
4	Skeletal Muscle Pump Impairment in Parkinson's Disease: Preliminary Results. , 2021, , .		1
5	Respiratory Pump Contributions to Hemodynamic Responses in Lower-Body Negative Pressure: Preliminary Results. , 2021, , .		0
6	Cardio-postural interactions and muscle-pump baroreflex are severely impacted by 60-day bedrest immobilization. <i>Scientific Reports</i> , 2020, 10, 12042.	1.6	13
7	The repeatability of estimated systolic time intervals in healthy subjects using seismocardiogram and electrocardiogram. <i>Physiological Measurement</i> , 2020, 41, 02NT01.	1.2	5
8	Relationship between Ischemic Stroke and Pulse Rate Variability as a Surrogate of Heart Rate Variability. <i>Brain Sciences</i> , 2019, 9, 162.	1.1	12
9	Effect of Aging on Muscle-Pump Baroreflex of Individual Leg Muscles During Standing. <i>Frontiers in Physiology</i> , 2019, 10, 845.	1.3	11
10	Identifying Patients With Coronary Artery Disease Using Rest and Exercise Seismocardiography. <i>Frontiers in Physiology</i> , 2019, 10, 1211.	1.3	8
11	Comparison of Different Methods for Estimating Cardiac Timings: A Comprehensive Multimodal Echocardiography Investigation. <i>Frontiers in Physiology</i> , 2019, 10, 1057.	1.3	47
12	Cardiac Mechanical Signals. <i>Series in Bioengineering</i> , 2019, , 63-79.	0.3	1
13	Early Identification of Bleeding: Past Achievement, Current Limitations & Future Development. , 2018, , .		0
14	Comparison of Autonomic Control of Blood Pressure During Standing and Artificial Gravity Induced via Short-Arm Human Centrifuge. <i>Frontiers in Physiology</i> , 2018, 9, 712.	1.3	21
15	Analyzing Seismocardiogram Cycles to Identify the Respiratory Phases. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 1786-1792.	2.5	42
16	A Hidden Markov Model for Seismocardiography. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 2361-2372.	2.5	34
17	Skeletal Muscle Pump Drives Control of Cardiovascular and Postural Systems. <i>Scientific Reports</i> , 2017, 7, 45301.	1.6	42
18	Significant role of the cardiopostural interaction in blood pressure regulation during standing. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2017, 313, H568-H577.	1.5	21

#	ARTICLE	IF	CITATIONS
19	Automatic and Robust Delineation of the Fiducial Points of the Seismocardiogram Signal for Noninvasive Estimation of Cardiac Time Intervals. IEEE Transactions on Biomedical Engineering, 2017, 64, 1701-1710.	2.5	56
20	Non-linear Heart Rate and Blood Pressure Interaction in Response to Lower-Body Negative Pressure. Frontiers in Physiology, 2017, 8, 767.	1.3	15
21	Vertical ground reaction force marker for Parkinson's disease. PLoS ONE, 2017, 12, e0175951.	1.1	81
22	Analysis of causal cardio-postural interaction under orthostatic stress using convergent cross mapping. , 2016, 2016, 2319-2322.		6
23	Toward Hand Arthritis Diagnostics Using Smart Phones: Camera Distortion Effect Correction1. Journal of Medical Devices, Transactions of the ASME, 2016, 10, .	0.4	1
24	Fusion of Electrocardiogram and Accelerocardiogram Derived Respiration Methods for Estimation of Respiratory Phases. Journal of Medical Devices, Transactions of the ASME, 2016, 10, .	0.4	2
25	Accurate and consistent automatic seismocardiogram annotation without concurrent ECG. Physiological Measurement, 2016, 37, 1588-1604.	1.2	18
26	Systolic Time Intervals and New Measurement Methods. Cardiovascular Engineering and Technology, 2016, 7, 118-125.	0.7	48
27	Detection and classification of acne lesions in acne patients: A mobile application. , 2016, , .		43
28	A review of methods and applications of brain computer interface systems. , 2016, , .		14
29	Computer-assisted image processing technique for tracking wound progress. , 2016, , .		3
30	Tremor quantification of Parkinson's disease - a pilot study. , 2016, , .		19
31	Ballistocardiogram signal as a measure of cardio-postural variation during orthostatic challenge. , 2016, , .		0
32	Aviation navigation feedback device. , 2016, , .		0
33	Neurocognitive deficits observed on high school football players with history of concussion: A preliminary study. , 2016, , .		1
34	Preliminary Results for Estimating Pulse Transit Time Using Seismocardiogram1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	13
35	Performance Evaluation of Heartbeat Classification Methods Based on Morphological Descriptors1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	0
36	Identification of respiratory phases using seismocardiogram: A machine learning approach. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
37	Pulse transit time extraction from Seismocardiogram and its relationship with pulse pressure. , 2015, , .		10
38	Accurate and consistent automatic seismocardiogram annotation without concurrent ECG. , 2015, , .		3
39	Using electromechanical signals recorded from the body for respiratory phase detection and respiratory time estimation: A comparative study. , 2015, , .		8
40	Automatic Annotation of Seismocardiogram With High-Frequency Precordial Accelerations. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1428-1434.	3.9	68
41	Ballistocardiography and Seismocardiography: A Review of Recent Advances. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1414-1427.	3.9	529
42	Precordial Vibrations Provide Noninvasive Detection of Early-Stage Hemorrhage. Shock, 2014, 41, 91-96.	1.0	44
43	Assessment of respiratory flow and efforts using upper-body acceleration. Medical and Biological Engineering and Computing, 2014, 52, 653-661.	1.6	12
44	Seismocardiography: Past, present and future. , 2013, 2013, 7004-7.		99
45	Seismocardiographic adjustment of diastolic timed vibrations. , 2012, 2012, 3797-800.		9
46	Myocardial contractility: A seismocardiography approach. , 2012, 2012, 3801-4.		32
47	Monitoring torso acceleration for estimating the respiratory flow and efforts for sleep apnea detection. , 2012, 2012, 6345-8.		8
48	Mechanisms Underlying Isovolumic Contraction and Ejection Peaks in Seismocardiogram Morphology. Journal of Medical and Biological Engineering, 2012, 32, 103.	1.0	38
49	Evaluation of a Novel Integrated Sensor System for Synchronous Measurement of Cardiac Vibrations and Cardiac Potentials. Journal of Medical Systems, 2011, 35, 445-455.	2.2	17
50	Validation of respiratory signal derived from suprasternal notch acceleration for sleep apnea detection. , 2011, 2011, 3824-7.		20
51	Infrasonic cardiac signals: Complementary windows to cardiovascular dynamics. , 2011, 2011, 4275-8.		16
52	Mechanically Flexible Wireless Multisensor Platform for Human Physical Activity and Vitals Monitoring. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 281-294.	2.7	91
53	Comparative analysis of seismocardiogram waves with the ultra-low frequency ballistocardiogram. , 2009, 2009, 2851-4.		15
54	Comparative analysis of three different modalities for characterization of the seismocardiogram. , 2009, 2009, 2899-903.		25

#	ARTICLE	IF	CITATIONS
55	Improvement of ballistocardiogram processing by inclusion of respiration information. <i>Physiological Measurement</i> , 2008, 29, 771-781.	1.2	45
56	Development of a Novel Contactless Mechanocardiograph Device. <i>International Journal of Telemedicine and Applications</i> , 2008, 2008, 1-5.	1.1	12
57	Radar mechanocardiography: A novel analysis of the mechanical behavior of the heart. , 2008, 2008, 4863-6.		2
58	Editorial: Cardiac Vibration Signals: Old Techniques, New Tricks, and Applications. <i>Frontiers in Physiology</i> , 0, 13, .	1.3	3