

# Kouhyar Tavakolian

## List of Publications by Year in Descending Order

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**Version:** 2024-04-19

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

48  
papers

1,178  
citations

17  
h-index

33  
g-index

58  
ext. papers

1,466  
ext. citations

3  
avg, IF

4.53  
L-index

#	Paper	IF	Citations
48	Detecting Coronary Artery Disease Using Rest Seismocardiography and Gyrocardiography.. <i>Frontiers in Physiology</i> , <b>2021</b> , 12, 758727	4.6	0
47	The repeatability of estimated systolic time intervals in healthy subjects using seismocardiogram and electrocardiogram. <i>Physiological Measurement</i> , <b>2020</b> , 41, 02NT01	2.9	3
46	Cardio-postural interactions and muscle-pump baroreflex are severely impacted by 60-day bedrest immobilization. <i>Scientific Reports</i> , <b>2020</b> , 10, 12042	4.9	4
45	Comparison of Different Methods for Estimating Cardiac Timings: A Comprehensive Multimodal Echocardiography Investigation. <i>Frontiers in Physiology</i> , <b>2019</b> , 10, 1057	4.6	21
44	Cardiac Mechanical Signals. <i>Series in Bioengineering</i> , <b>2019</b> , 63-79	0.7	1
43	Relationship between Ischemic Stroke and Pulse Rate Variability as a Surrogate of Heart Rate Variability. <i>Brain Sciences</i> , <b>2019</b> , 9,	3.4	6
42	Effect of Aging on Muscle-Pump Baroreflex of Individual Leg Muscles During Standing. <i>Frontiers in Physiology</i> , <b>2019</b> , 10, 845	4.6	6
41	Identifying Patients With Coronary Artery Disease Using Rest and Exercise Seismocardiography. <i>Frontiers in Physiology</i> , <b>2019</b> , 10, 1211	4.6	3
40	Comparison of Autonomic Control of Blood Pressure During Standing and Artificial Gravity Induced via Short-Arm Human Centrifuge. <i>Frontiers in Physiology</i> , <b>2018</b> , 9, 712	4.6	14
39	Analyzing Seismocardiogram Cycles to Identify the Respiratory Phases. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 1786-1792	5	34
38	A Hidden Markov Model for Seismocardiography. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2361-2372	5	26
37	Skeletal Muscle Pump Drives Control of Cardiovascular and Postural Systems. <i>Scientific Reports</i> , <b>2017</b> , 7, 45301	4.9	22
36	Significant role of the cardiopostural interaction in blood pressure regulation during standing. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2017</b> , 313, H568-H577	5.2	11
35	Automatic and Robust Delineation of the Fiducial Points of the Seismocardiogram Signal for Non-invasive Estimation of Cardiac Time Intervals. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 1701-1710	5	42
34	Non-linear Heart Rate and Blood Pressure Interaction in Response to Lower-Body Negative Pressure. <i>Frontiers in Physiology</i> , <b>2017</b> , 8, 767	4.6	8
33	Vertical ground reaction force marker for Parkinson's disease. <i>PLoS ONE</i> , <b>2017</b> , 12, e0175951	3.7	49
32	A review of methods and applications of brain computer interface systems <b>2016</b> ,		8

31	Tremor quantification of Parkinson's disease - a pilot study <b>2016</b> ,			11
30	Neurocognitive deficits observed on high school football players with history of concussion: A preliminary study <b>2016</b> ,			1
29	Analysis of causal cardio-postural interaction under orthostatic stress using convergent cross mapping. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016</i> , 2016, 2319-2322	0.9		4
28	Toward Hand Arthritis Diagnostics Using Smart Phones: Camera Distortion Effect Correction1. <i>Journal of Medical Devices, Transactions of the ASME, 2016</i> , 10,	1.3		1
27	Fusion of Electrocardiogram and Accelerocardiogram Derived Respiration Methods for Estimation of Respiratory Phases. <i>Journal of Medical Devices, Transactions of the ASME, 2016</i> , 10,	1.3		1
26	Accurate and consistent automatic seismocardiogram annotation without concurrent ECG. <i>Physiological Measurement, 2016</i> , 37, 1588-604	2.9		14
25	Systolic Time Intervals and New Measurement Methods. <i>Cardiovascular Engineering and Technology, 2016</i> , 7, 118-25	2.2		36
24	Detection and classification of acne lesions in acne patients: A mobile application <b>2016</b> ,			22
23	Ballistocardiography and seismocardiography: a review of recent advances. <i>IEEE Journal of Biomedical and Health Informatics, 2015</i> , 19, 1414-27	7.2		363
22	Preliminary Results for Estimating Pulse Transit Time Using Seismocardiogram1. <i>Journal of Medical Devices, Transactions of the ASME, 2015</i> , 9,	1.3		9
21	Identification of respiratory phases using seismocardiogram: A machine learning approach <b>2015</b> ,			5
20	Pulse transit time extraction from Seismocardiogram and its relationship with pulse pressure <b>2015</b> ,			8
19	Accurate and consistent automatic seismocardiogram annotation without concurrent ECG <b>2015</b> ,			3
18	Using electromechanical signals recorded from the body for respiratory phase detection and respiratory time estimation: A comparative study <b>2015</b> ,			5
17	Automatic annotation of seismocardiogram with high-frequency precordial accelerations. <i>IEEE Journal of Biomedical and Health Informatics, 2015</i> , 19, 1428-34	7.2		54
16	Assessment of respiratory flow and efforts using upper-body acceleration. <i>Medical and Biological Engineering and Computing, 2014</i> , 52, 653-61	3.1		10
15	Precordial vibrations provide noninvasive detection of early-stage hemorrhage. <i>Shock, 2014</i> , 41, 91-6	3.4		37
14	Seismocardiography: past, present and future. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013</i> , 2013, 7004-7	0.9		75

13	Seismocardiographic adjustment of diastolic timed vibrations. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2012, 2012, 3797-800</i>	0.9	8
12	Myocardial contractility: a seismocardiography approach. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2012, 2012, 3801-4</i>	0.9	21
11	Monitoring torso acceleration for estimating the respiratory flow and efforts for sleep apnea detection. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2012, 2012, 6345-8</i>	0.9	8
10	Mechanisms Underlying Isovolumic Contraction and Ejection Peaks in Seismocardiogram Morphology. <i>Journal of Medical and Biological Engineering, 2012, 32, 103-110</i>	2.2	31
9	Evaluation of a novel integrated sensor system for synchronous measurement of cardiac vibrations and cardiac potentials. <i>Journal of Medical Systems, 2011, 35, 445-55</i>	5.1	13
8	Validation of respiratory signal derived from suprasternal notch acceleration for sleep apnea detection. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2011, 2011, 3824-7</i>	0.9	17
7	Infrasonic cardiac signals: complementary windows to cardiovascular dynamics. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2011, 2011, 4275-8</i>	0.9	14
6	Mechanically flexible wireless multisensor platform for human physical activity and vitals monitoring. <i>IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 281-94</i>	5.1	70
5	Comparative analysis of seismocardiogram waves with the ultra-low frequency ballistocardiogram. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 2851-4</i>	0.9	13
4	Comparative analysis of three different modalities for characterization of the seismocardiogram. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 2899-903</i>	0.9	17
3	Improvement of ballistocardiogram processing by inclusion of respiration information. <i>Physiological Measurement, 2008, 29, 771-81</i>	2.9	36
2	Development of a novel contactless mechanocardiograph device. <i>International Journal of Telemedicine and Applications, 2008, 436870</i>	2.6	11
1	Radar mechanocardiography: a novel analysis of the mechanical behavior of the heart. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2008, 2008, 4863-6</i>	0.9	1