Hsien-Tsai Wu

List of Publications by Year
in descending order

57 papers	**633** citations	623734 **14** h-index	642732 **23** g-index
57 all docs	**57** docs citations	**57** times ranked	**527** citing authors

#	Article	IF	Citations
1	Association of Risk Factors With Increased Pulse Wave Velocity Detected by a Novel Method Using Dual-Channel Photoplethysmography. American Journal of Hypertension, 2005, 18, 1118-1122.	2.0	57
2	Arterial Stiffness Using Radial Arterial Waveforms Measured at the Wrist as an Indicator of Diabetic Control in the Elderly. IEEE Transactions on Biomedical Engineering, 2011, 58, 243-252.	4.2	54
3	Multiscale Entropy Analysis of Pulse Wave Velocity for Assessing Atherosclerosis in the Aged and Diabetic. IEEE Transactions on Biomedical Engineering, 2011, 58, 2978-2981.	4.2	46
4	Measuring Pulse Wave Velocity Using ECG and Photoplethysmography. Journal of Medical Systems, 2011, 35, 771-777.	3.6	37
5	Novel application of parameters in waveform contour analysis for assessing arterial stiffness in aged and atherosclerotic subjects. Atherosclerosis, 2010, 213, 173-177.	0.8	35
6	Multiscale Entropy Analysis of Heart Rate Variability for Assessing the Severity of Sleep Disordered Breathing. Entropy, 2015, 17, 231-243.	2.2	30
7	Assessment of Subtle Changes in Diabetes-Associated Arteriosclerosis using Photoplethysmographic Pulse Wave from Index Finger. Journal of Medical Systems, 2018, 42, 43.	3.6	29
8	Arterial Waveforms Measured at the Wrist as Indicators of Diabetic Endothelial Dysfunction in the Elderly. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 162-169.	4.7	28
9	Multiscale Cross-Approximate Entropy Analysis as a Measurement of Complexity between ECG R-R Interval and PPG Pulse Amplitude Series among the Normal and Diabetic Subjects. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-7.	1.3	25
10	Application of a Modified Entropy Computational Method in Assessing the Complexity of Pulse Wave Velocity Signals in Healthy and Diabetic Subjects. Entropy, 2014, 16, 4032-4043.	2.2	25
11	Multiscale Cross-Approximate Entropy Analysis as a Measure of Complexity among the Aged and Diabetic. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-7.	1.3	22
12	Combination of R-R Interval and Crest Time in Assessing Complexity Using Multiscale Cross-Approximate Entropy in Normal and Diabetic Subjects. Entropy, 2018, 20, 497.	2.2	16
13	Six-channel ECG-based pulse wave velocity for assessing whole-body arterial stiffness. Blood Pressure, 2012, 21, 167-176.	1.5	15
14	Assessment of autonomic dysfunction in patients with type 2 diabetes using reactive hyperemia. Journal of Theoretical Biology, 2013, 330, 9-17.	1.7	14
15	Multiscale entropic assessment of autonomic dysfunction in patients with obstructive sleep apnea and therapeutic impact of continuous positive airway pressure treatment. Sleep Medicine, 2016, 20, 12-17.	1.6	12
16	Percussion Entropy Analysis of Synchronized ECG and PPG Signals as a Prognostic Indicator for Future Peripheral Neuropathy in Type 2 Diabetic Subjects. Diagnostics, 2020, 10, 32.	2.6	12
17	Instantaneous frequency from Hilbert-Huang transformation of digital volume pulse as indicator of diabetes and arterial stiffness in upper-middle-aged subjects. Scientific Reports, 2018, 8, 15771.	3.3	11
18	Digital Volume Pulse Measured at the Fingertip as an Indicator of Diabetic Peripheral Neuropathy in the Aged and Diabetic. Entropy, 2019, 21, 1229.	2.2	11

#	Article	IF	Citations
19	Difference in bilateral digital volume pulse as a novel non-invasive approach to assessing arteriosclerosis in aged and diabetic subjects: A preliminary study. Diabetes and Vascular Disease Research, 2017, 14, 254-257.	2.0	10
20	Multiscale Cross-Approximate Entropy Analysis of Bilateral Fingertips Photoplethysmographic Pulse Amplitudes among Middle-to-Old Aged Individuals with or without Type 2 Diabetes. Entropy, 2017, 19, 145.	2.2	10
21	Discrepancies between Conventional Multiscale Entropy and Modified Short-Time Multiscale Entropy of Photoplethysmographic Pulse Signals in Middle- and Old- Aged Individuals with or without Diabetes. Entropy, 2017, 19, 132.	2.2	10
22	Assessment of Diabetic Autonomic Nervous Dysfunction with a Novel Percussion Entropy Approach. Complexity, 2019, 2019, 1-11.	1.6	10
23	Application of Short-Time MSE in Assessing Impact of Acupuncture on Peripheral Blood Flow and Autonomic Activities in Normal and Overweight Subjects. Journal of Medical and Biological Engineering, 2016, 36, 386-395.	1.8	9
24	Assessment of Vascular Health With Photoplethysmographic Waveforms From the Fingertip. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 382-386.	6.3	9
25	Application of a Speedy Modified Entropy Method in Assessing the Complexity of Baroreflex Sensitivity for Age-Controlled Healthy and Diabetic Subjects. Entropy, 2019, 21, 894.	2.2	9
26	Machine learning prediction of future peripheral neuropathy in type 2 diabetics with percussion entropy and body mass indices. Biocybernetics and Biomedical Engineering, 2021, 41, 1140-1149.	5.9	8
27	Application of multiscale entropy in arterial waveform contour analysis in healthy and diabetic subjects. Medical and Biological Engineering and Computing, 2015, 53, 89-98.	2.8	7
28	Prognosis of Diabetic Peripheral Neuropathy via Decomposed Digital Volume Pulse from the Fingertip. Entropy, 2020, 22, 754.	2.2	7
29	Novel Application of a Multiscale Entropy Index as a Sensitive Tool for Detecting Subtle Vascular Abnormalities in the Aged and Diabetic. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-8.	1.3	6
30	Vibration signals of snoring as a simple severity predictor for obstructive sleep apnea. Clinical Respiratory Journal, 2016, 10, 440-448.	1.6	6
31	Effects of Combined Far-Infrared Radiation and Acupuncture at ST36 on Peripheral Blood Perfusion and Autonomic Activities. Evidence-based Complementary and Alternative Medicine, 2017, 2017, 1-7.	1.2	6
32	Multiscale Entropy Analysis of Surface Electromyographic Signals from the Urethral Sphincter as a Prognostic Indicator for Surgical Candidates with Primary Bladder Neck Obstruction. Entropy, 2015, 17, 8089-8098.	2.2	5
33	Development of Easy Operating Arterial Stiffness Assessment Instrument for Homecare. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5869-72.	0.5	4
34	Penile Arterial Waveform Analyzer for Assessing Penile Vascular Function in Young Adults. Annals of Biomedical Engineering, 2011, 39, 2857-2868.	2.5	4
35	Simultaneous assessment of autonomic nervous and vascular endothelial functions in a rat model. Biomedizinische Technik, 2013, 58, 205-12.	0.8	4
36	Application of multiscale Poincaré short-time computation versus multiscale entropy in analyzing fingertip photoplethysmogram amplitudes to differentiate diabetic from non-diabetic subjects. Computer Methods and Programs in Biomedicine, 2018, 166, 115-121.	4.7	4

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37	Digital Pulse Volume Based Endothelial Function Detector for Early Stage Formation of Atherosclerosis. , 2008, , .		3
38	Endothelium function assessment with radial pulse wave signals. , 2009, 2009, 3035-8.		3
39	Penile Arterial Waveform Analyzing System for Early Identification of Young Adults with High Risk of Erectile Dysfunction. Journal of Sexual Medicine, 2012, 9, 1094-1105.	0.6	3
40	Effects of First-Time Overnight CPAP Therapy for Increasing the Complexity of the Patientâ€™s Physiological System. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-7.	1.3	3
41	New Application of an Instantaneous Frequency Parameter for Assessing Far Infrared Fabric Effects in Aged Subjects. Electronics (Switzerland), 2020, 9, 138.	3.1	3
42	A First Step towards a Comprehensive Approach to Harmonic Analysis of Synchronous Peripheral Volume Pulses: A Proof-of-Concept Study. Journal of Personalized Medicine, 2021, 11, 1263.	2.5	3
43	Compatibility of pulseâ€“pulse intervals with Râ€“R intervals in assessing cardiac autonomic function and its relation to risks of atherosclerosis. Tzu Chi Medical Journal, 2020, 32, 41.	1.1	2
44	Reactive Hyperemia-Triggered Wrist Pulse Analysis for Early Monitoring of Young Men with High Atherosclerotic Risk. Diagnostics, 2021, 11, 1918.	2.6	2
45	A non-invasive assessment for endothelial function of small animals. , 2008, 2008, 5918-21.		1
46	Linguistic analysis of the arterial pressure signals using frequency and rank order statistics. , 2010, , .		1
47	A Simplified Approach to Assessing Penile Endothelial Function in Young Individuals at Risk of Erectile Dysfunction. Journal of Andrology, 2012, 33, 1254-1262.	2.0	1
48	In vivo assessment of endothelial function in small animals using an infrared pulse detector. Tzu Chi Medical Journal, 2019, 31, 217.	1.1	1
49	A Non-Invasive Arterial Stiffness Assessment Instrument for Homecare. , 2008, , .		0
50	A Reliable Multi-Channel Measurement Based on ECG for Atherosclerosis Assessment. , 2009, , .		0
51	Predicting arterial stiffness with the aid of ensemble empirical mode decomposition(EEMD) algorithm. , 2010, , .		0
52	Ensemble Empirical Mode Decomposition for atherosclerosis in high-risk subjects. , 2011, , .		0
53	Multiscale entropy indicates vascular abnormalities in the aged. , 2011, , .		0
54	Poincar&#x00E9; plot indexes of pulse rate variability capture dynamic adaptations after reactive hyperemia in type 2 diabetic patients. , 2012, , .		0

#	Article	IF	Citations
55	Novel application of multiscale entropy in assessment of atherosclerosis in aged and diabetic subjects. , 2012, , .		0
56	Multiscale entropy analysis of surface electromyographic signals as a prognostic indicator for subtle functional impairment of urethral sphincter. , 2015, , .		0
57	Glycemic Control, Hand Activity, and Complexity of Biological Signals in Diabetes Mellitus. Complexity, 2017, 2017, 1-9.	1.6	0