# Jari Viik

List of Publications by Year
in descending order

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|---|---|---|---|
| 114<br>papers | 1,779<br>citations | 293460<br>24<br>h-index | 371746<br>37<br>g-index |
| 120<br>all docs | 120<br>docs citations | 120<br>times ranked | 2548<br>citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Resting heart rate predicts cardiac autonomic modulation during passive head-up tilt in subjects without cardiovascular diseases. Scandinavian Cardiovascular Journal, 2022, 56, 138-147. | 0.4 | 4 |
| 2 | Monitoring wound healing. , 2021, , 221-270. | | 1 |
| 3 | Bioimpedance method for monitoring venous ulcers: Clinical proof-of-concept study. Biosensors and Bioelectronics, 2021, 178, 112974. | 5.3 | 11 |
| 4 | Individual changes of central blood pressure in response to upright posture: different hemodynamic phenotypes. Journal of Hypertension, 2021, 39, 2403-2412. | 0.3 | 8 |
| 5 | QT variability unrelated to RR variability during stress testing for identification of coronary artery disease. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200261. | 1.6 | 1 |
| 6 | Eigenvector-based spatial ECG filtering improves QT delineation in stress test recordings. , 2021, , . | | 1 |
| 7 | Tidal breathing flow profiles during sleep in wheezing children measured by impedance pneumography. Respiratory Physiology and Neurobiology, 2020, 271, 103312. | 0.7 | 6 |
| 8 | A device for measuring sternal bone connectivity using vibration analysis techniques. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 81-90. | 1.0 | 2 |
| 9 | Reduced expiratory variability index (EVI) is associated with controller medication withdrawal and symptoms in wheezy children aged 1â€"5 years. Pediatric Allergy and Immunology, 2020, 31, 489-495. | 1.1 | 7 |
| 10 | Expiratory variability index is associated with asthma risk, wheeze and lung function in infants with recurrent respiratory symptoms. ERJ Open Research, 2020, 6, 00167-2020. | 1.1 | 2 |
| 11 | Combination of low blood pressure response, low exercise capacity and slow heart rate recovery during an exercise test significantly increases mortality risk. Annals of Medicine, 2019, 51, 390-396. | 1.5 | 12 |
| 12 | Noninvasive Cardiorespiratory Signals Analysis for Asthma Evolution Monitoring in Preschool Children. IEEE Transactions on Biomedical Engineering, 2019, 67, 1-1. | 2.5 | 7 |
| 13 | Bioimpedance Sensor Array for Long-Term Monitoring of Wound Healing from Beneath the Primary Dressings and Controlled Formation of $H_2O_2$ Using Low-Intensity Direct Current. Sensors, 2019, 19, 2505. | 2.1 | 32 |
| 14 | Tidal breathing flow volume profiles during sleep in wheezing infants measured by impedance pneumography. Journal of Applied Physiology, 2019, 126, 1409-1418. | 1.2 | 8 |
| 15 | Airway obstruction is associated with reduced variability in specific parts of the tidal breathing flowâ€"volume curve in young children. ERJ Open Research, 2019, 5, 00028-2019. | 1.1 | 7 |
| 16 | The Duke treadmill score with bicycle ergometer: Exercise capacity is the most important predictor of cardiovascular mortality. European Journal of Preventive Cardiology, 2019, 26, 199-207. | 0.8 | 24 |
| 17 | Metabolic syndrome is associated with decreased heart rate variability in a sexâ€"dependent manner: a comparison between 252 men and 249 women. Clinical Physiology and Functional Imaging, 2019, 39, 160-167. | 0.5 | 10 |
| 18 | Effects of Nitroglycerin to Ballistocardiography by EMFi. IFMBE Proceedings, 2019, , 541-545. | 0.2 | 0 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------|
| 19 | Detection of Snores Using Source Separation on an Emfit Signal. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1157-1167. | 3.9 | 14 |
| 20 | Long-term monitoring of acute wound healing from beneath the primary wound dressings. , 2018, , . | | 2 |
| 21 | A novel technique for analysis of postural information with wearable devices. , 2018, , . | | 1 |
| 22 | Nocturnal Heart Rate Variability Spectrum Characterization in Preschool Children With Asthmatic Symptoms. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1332-1340. | 3.9 | 16 |
| 23 | Twelve Years Follow-up of Ballistocardiography. IFMBE Proceedings, 2018, , 1117-1120. | 0.2 | 1 |
| 24 | Detection and Assessment of Sleep-Disordered Breathing with Emfit Mattress. IFMBE Proceedings, 2018, , 173-176. | 0.2 | 1 |
| 25 | Electrode Comparison for Textile-Integrated Electrocardiogram and Impedance Pneumography Measurement. IFMBE Proceedings, 2018, , 302-305. | 0.2 | 1 |
| 26 | Nonlinear Local Projection Filter for Impedance Pneumography. IFMBE Proceedings, 2018, , 306-309. | 0.2 | 3 |
| 27 | Linearity of Simultaneously Recorded Impedance Pneumography and Direct Pneumotachography in Thoracic Surgery Patients. IFMBE Proceedings, 2018, , 1077-1080. | 0.2 | 0 |
| 28 | Nonlinear Dynamics of Heart Rate Variability in Children with Asthmatic Symptoms. IFMBE Proceedings, 2018, , 815-818. | 0.2 | 1 |
| 29 | Nocturnal Use of Light Compression Garments and Recovery. IFMBE Proceedings, 2018, , 125-128. | 0.2 | 1 |
| 30 | Time characteristics of prolonged partial obstruction periods using an Emfit mattress. IFMBE Proceedings, 2018, , 775-778. | 0.2 | 0 |
| 31 | Late Breaking Abstract - Tidal breathing variability during sleep is a sensitive marker of disease control in small children with recurrent wheeze. , 2018, , . | | 0 |
| 32 | Measurement of tidal breathing flows in infants using impedance pneumography. European Respiratory Journal, 2017, 49, 1600926. | 3.1 | 25 |
| 33 | Bioimpedance measurement based evaluation of wound healing. Physiological Measurement, 2017, 38, 1373-1383. | 1.2 | 28 |
| 34 | Assessment of support vector machines and convolutional neural networks to detect snoring using Emfit mattress. , 2017, 2017, 2883-2886. | | 1 |
| 35 | Bioimpedance measurement system for evaluation of the status of wound healing. , 2016, , . | | 2 |
| 36 | Increased Cardiac Workload in the Upright Posture in Men: Noninvasive Hemodynamics in Men Versus Women. Journal of the American Heart Association, 2016, 5, . | 1.6 | 23 |

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|---|---------|-----|-----------|
| 37 | Spectral analysis of snoring events from an Emfit mattress. Physiological Measurement, 2016, 37, 2130-2143. | 1.2 | 11 |
| 38 | The type of the functional cardiovascular response to upright posture is associated with arterial stiffness: a cross-sectional study in 470 volunteers. BMC Cardiovascular Disorders, 2016, 16, 101. | 0.7 | 10 |
| 39 | Tidal flow variability measured by impedance pneumography relates to childhood asthma risk. European Respiratory Journal, 2016, 47, 1687-1696. | 3.1 | 34 |
| 40 | W2E-â€"Wellness Warehouse Engine for Semantic Interoperability of Consumer Health Data. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1632-1639. | 3.9 | 9 |
| 41 | Response patterns in finger and central body skin temperatures under mild whole body cooling in an elderly and in a young male - a pre-study. Extreme Physiology and Medicine, 2015, 4, . | 2.5 | 1 |
| 42 | Data correction for seven activity trackers based on regression models. , 2015, 2015, 1592-5. | | 6 |
| 43 | Prognostic capacity of a clinically indicated exercise test for cardiovascular mortality is enhanced by combined analysis of exercise capacity, heart rate recovery and T-wave alternans. European Journal of Preventive Cardiology, 2015, 22, 1162-1170. | 0.8 | 16 |
| 44 | Effect of heart rate correction on pre- and post-exercise heart rate variability to predict risk of mortalityâ¢â‚¬â€an experimental study on the FINCAVAS cohort. Frontiers in Physiology, 2014, 5, 208. | 1.3 | 28 |
| 45 | A texture analysis method for MR images of airway dilator muscles: a feasibility study. Dentomaxillofacial Radiology, 2014, 43, 20130403. | 1.3 | 8 |
| 46 | Sympathetic activityâ€"associated periodic repolarization dynamics predict mortality following myocardial infarction. Journal of Clinical Investigation, 2014, 124, 1770-1780. | 3.9 | 83 |
| 47 | Sympathetic activityâ€"associated periodic repolarization dynamics predict mortality following myocardial infarction. Journal of Clinical Investigation, 2014, 124, 2808-2808. | 3.9 | 0 |
| 48 | Femoral neck crossâ€sectional geometry and exercise loading. Clinical Physiology and Functional Imaging, 2013, 33, 258-266. | 0.5 | 17 |
| 49 | Tidal breathing flow-volume curves with impedance pneumography during expiratory loading. , 2013, 2013, 2437-40. | | 5 |
| 50 | Genome-Wide Association Study Pinpoints a New Functional Apolipoprotein B Variant Influencing Oxidized Low-Density Lipoprotein Levels But Not Cardiovascular Events. Circulation: Cardiovascular Genetics, 2013, 6, 73-81. | 5.1 | 22 |
| 51 | Novel electrode configuration for highly linear impedance pneumography. Biomedizinische Technik, 2013, 58, 35-8. | 0.9 | 39 |
| 52 | Local ballistocardiographic spectrum studies from signals obtained from limbs and carotid artery with an EMFi sensor induced with a tilt table. , 2013, 2013, 7008-11. | | 6 |
| 53 | Tidal breathing flow measurement in awake young children by using impedance pneumography. Journal of Applied Physiology, 2013, 115, 1725-1731. | 1.2 | 22 |
| 54 | Cardiomyocyte MEA Data Analysis (CardioMDA) â€" A Novel Field Potential Data Analysis Software for Pluripotent Stem Cell Derived Cardiomyocytes. PLoS ONE, 2013, 8, e73637. | 1.1 | 31 |

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|---|---------|-----|-----------|
| 55 | Heart rate variability changes at 2400 m altitude predicts acute mountain sickness on further ascent at 3000–4300 m altitudes. Frontiers in Physiology, 2012, 3, 336. | 1.3 | 38 |
| 56 | Allelic variant of *NOS1AP* effects on cardiac alternans of repolarization during exercise testing. Scandinavian Journal of Clinical and Laboratory Investigation, 2012, 72, 100-107. | 0.6 | 3 |
| 57 | Postexercise recovery of the spatial QRS/T angle as a predictor of sudden cardiac death. Heart Rhythm, 2012, 9, 1083-1089. | 0.3 | 14 |
| 58 | Multilead Measurement System for the Time-Domain Analysis of Bioimpedance Magnitude. IEEE Transactions on Biomedical Engineering, 2012, 59, 2273-2280. | 2.5 | 9 |
| 59 | Importance of regional specificity of T-wave alternans in assessing risk for cardiovascular mortality and sudden cardiac death during routine exercise testing. Heart Rhythm, 2011, 8, 385-390. | 0.3 | 30 |
| 60 | A method for suppressing cardiogenic oscillations in impedance pneumography. Physiological Measurement, 2011, 32, 337-345. | 1.2 | 29 |
| 61 | Common variation in the ADAM8 gene affects serum sADAM8 concentrations and the risk of myocardial infarction in two independent cohorts. Atherosclerosis, 2011, 218, 127-133. | 0.4 | 23 |
| 62 | Short and longer term repeatability of ballistocardiography in a sitting position with EMFi sensor. Medical and Biological Engineering and Computing, 2011, 49, 881-889. | 1.6 | 16 |
| 63 | QRS-T morphology measured from exercise electrocardiogram as a predictor of cardiac mortality. Europace, 2011, 13, 701-707. | 0.7 | 22 |
| 64 | Agreement Between Impedance Pneumography and Pneumotachograph in Estimation of a Tidal Breathing Parameter. Chest, 2010, 138, 816A. | 0.4 | 3 |
| 65 | Assessment of Pulmonary Flow Using Impedance Pneumography. IEEE Transactions on Biomedical Engineering, 2010, 57, 2277-2285. | 2.5 | 84 |
| 66 | Pattern of crescendo TWA may disclose the underlying cardiac pathology. Journal of Electrocardiology, 2010, 43, 449-451. | 0.4 | 1 |
| 67 | New precordial bipolar electrocardiographic leads for detecting left ventricular hypertrophy. Journal of Electrocardiology, 2010, 43, 654-659. | 0.4 | 4 |
| 68 | Value of leads V4R and CM5 in the detection of coronary artery disease during exercise electrocardiographic test. Clinical Physiology and Functional Imaging, 2010, 30, 308-312. | 0.5 | 6 |
| 69 | IL–18 gene polymorphism, cardiovascular mortality and coronary artery disease. European Journal of Clinical Investigation, 2010, 40, 994-1001. | 1.7 | 18 |
| 70 | Atrioventricular conduction and cardiovascular mortality: Assessment of recovery PR interval is superior to pre-exercise measurement. Heart Rhythm, 2010, 7, 796-801. | 0.3 | 13 |
| 71 | Exercise electrocardiography detection of coronary artery disease by ST-segment depression/heart rate hysteresis in women: The Finnish Cardiovascular Study. International Journal of Cardiology, 2010, 140, 182-188. | 0.8 | 9 |
| 72 | Exercise-test-related heart rate variability and mortality. International Journal of Cardiology, 2010, 144, 154-155. | 0.8 | 7 |

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|---|---------|----|-----------|
| 73 | Snoring seconds detection with EMFi sensor strips. , 2010, , . | | 2 |
| 74 | Estimating the measuring sensitivity of unipolar and bipolar ECG with lead field method and FDM models. Computer Methods and Programs in Biomedicine, 2009, 94, 161-167. | 2.6 | 1 |
| 75 | Best Electrode Locations for a Small Bipolar ECG Device: Signal Strength Analysis of Clinical Data. Annals of Biomedical Engineering, 2009, 37, 331-336. | 1.3 | 43 |
| 76 | Ballistocardiogaphic studies with acceleration and electromechanical film sensors. Medical Engineering and Physics, 2009, 31, 1154-1165. | 0.8 | 20 |
| 77 | Enhanced Predictive Power of Quantitative TWA during Routine Exercise Testing in the Finnish Cardiovascular Study. Journal of Cardiovascular Electrophysiology, 2009, 20, 408-415. | 0.8 | 58 |
| 78 | Post-Exercise Assessment of Cardiac Repolarization Alternans in Patients With Coronary Artery Disease Using the Modified Moving Average Method. Journal of the American College of Cardiology, 2009, 53, 1130-1137. | 1.2 | 51 |
| 79 | Impaired exercise capacity predicts sudden cardiac death in a low-risk population: Enhanced specificity with heightened T-wave alternans. Annals of Medicine, 2009, 41, 380-389. | 1.5 | 6 |
| 80 | Combined assessment of heart rate recovery and T-wave alternans during routine exercise testing improves prediction of total and cardiovascular mortality: The Finnish Cardiovascular Study. Heart Rhythm, 2009, 6, 1765-1771. | 0.3 | 43 |
| 81 | Effect of common KCNE1 and SCN5A ion channel gene variants on T-wave alternans, a marker of cardiac repolarization, during clinical exercise stress test: the Finnish Cardiovascular Study. Translational Research, 2008, 152, 49-58. | 2.2 | 10 |
| 82 | Perceived Mental Stress and Reactions in Heart Rate Variabilityâ€"A Pilot Study Among Employees of an Electronics Company. International Journal of Occupational Safety and Ergonomics, 2008, 14, 275-283. | 1.1 | 91 |
| 83 | The prognostic value of haemodynamic parameters in the recovery phase of an exercise test. The Finnish Cardiovascular Study. Journal of Human Hypertension, 2008, 22, 537-543. | 1.0 | 19 |
| 84 | Potassium channel KCNH2 K897T polymorphism and cardiac repolarization during exercise test: The Finnish Cardiovascular Study. Scandinavian Journal of Clinical and Laboratory Investigation, 2008, 68, 31-38. | 0.6 | 6 |
| 85 | Gender and effects of a common genetic variant in the NOS1 regulator NOS1AP on cardiac repolarization in 3761 individuals from two independent populations. International Journal of Epidemiology, 2008, 37, 1132-1141. | 0.9 | 51 |
| 86 | Ballistocardiography in sitting and horizontal positions. Physiological Measurement, 2008, 29, 1071-1087. | 1.2 | 34 |
| 87 | T-wave alternans predicts mortality in a population undergoing a clinically indicated exercise test. European Heart Journal, 2007, 28, 2332-2337. | 1.0 | 119 |
| 88 | Heart rate variability derived from exercise ECG in the detection of coronary artery disease. Physiological Measurement, 2007, 28, 1189-1200. | 1.2 | 16 |
| 89 | T-wave alternans during exercise testing calculated by the method of 'modified moving average': reply. European Heart Journal, 2007, 28, 2691-2692. | 1.0 | 0 |
| 90 | Heart rate variability is dependent on the level of heart rate. American Heart Journal, 2007, 154, e13. | 1.2 | 28 |

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|---|---------|-----|-----------|
| 91 | Age and Gender Biases in Secondary??Prevention of Coronary??Heart Disease in a Finnish??University Hospital Setting. Clinical Drug Investigation, 2007, 27, 673-681. | 1.1 | 2 |
| 92 | The p22phox C242T gene polymorphism is associated with a reduced risk of angiographically verified coronary artery disease in a high-risk Finnish Caucasian population. The Finnish Cardiovascular Study. American Heart Journal, 2006, 152, 538-542. | 1.2 | 24 |
| 93 | Effects of polymorphisms in Î²1-adrenoceptor and Î±-subunit of G protein on heart rate and blood pressure during exercise test. The Finnish Cardiovascular Study. Journal of Applied Physiology, 2006, 100, 507-511. | 1.2 | 36 |
| 94 | The Finnish Cardiovascular Study (FINCAVAS): characterising patients with high risk of cardiovascular morbidity and mortality. BMC Cardiovascular Disorders, 2006, 6, 9. | 0.7 | 48 |
| 95 | Independent Component Analysis of Parameterized ECG Signals. , 2006, 2006, 5704-7. | | 4 |
| 96 | Independent Component Analysis of Parameterized Electrocardiogram Signals. , 2006, , . | | 1 |
| 97 | REPRODUCIBILITY OF THE ST/HR ANALYSIS DURING ECG TEST IN ASYMPTOMATIC MIDDLE-AGED WOMEN. , 2005, , . | | 0 |
| 98 | Estimation of ECG signal of closely separated bipolar electrodes using thorax models. , 2004, 2004, 801-4. | | 3 |
| 99 | ECG Variable Cine: computer program for presentation of temporal changes in ECG variables over different number of ECG leads. Computer Methods and Programs in Biomedicine, 2000, 63, 147-155. | 2.6 | 0 |
| 100 | Should elevation of the ST segment be included in the definition of ST/HR index?. Journal of Electrocardiology, 2000, 33, 161. | 0.4 | 0 |
| 101 | Detection of coronary artery disease using maximum value of ST/HR hysteresis over different number of leads. Journal of Electrocardiology, 1999, 32, 70-83. | 0.4 | 17 |
| 102 | Correct Utilization of Exercise Electrocardiographic Leads in Differentiation of Men With Coronary Artery Disease from Patients With a Low Likelihood of Coronary Artery Disease Using Peak Exercise ST-Segment Depression 11This work was supported in part by the Academy of Finland, the Emil Aaltonen Foundation, the Finnish Cultural Foundation (Pirkanmaa Fund), the Ragnar Granit Foundation, the Tampere Science Foundation, and the Wihuri Foundation.. American Journal of Cardiology, 1998, 81, 964-969. | 0.7 | 21 |
| 103 | The effect of lead selection on traditional and heart rateâ€"adjusted ST segment analysis in the detection of coronary artery disease during exercise testing. American Heart Journal, 1997, 134, 488-494. | 1.2 | 18 |
| 104 | Computer model analysis of the relationship of ST-segment and ST-segment/heart rate slope response to the constituents of the ischemic injury source. Journal of Electrocardiology, 1997, 30, 161-174. | 0.4 | 8 |
| 105 | Reproducibility of the ST-segment depression/heart rate analysis of the exercise electrocardiographic test in asymptomatic middle-aged population. American Journal of Cardiology, 1997, 79, 1414-1416. | 0.7 | 5 |
| 106 | Accurate detection of coronary artery disease by integrated analysis of the ST-segment depression/heart rate patterns during the exercise and recovery phases of the exercise electrocardiography test. American Journal of Cardiology, 1996, 78, 1002-1006. | 0.7 | 50 |
| 107 | Comparison between ST depression and elevation in myocardial ischemia diagnosis. , 1992, , . | | 1 |
| 108 | Importance of radial sensitivity in detection of ischemie injury currents. , 1992, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Improving ischemia diagnosis with synthesized ECG leads. , 0, , . | | 0 |
| 110 | Simulated ST segment potentials generated in single and multivessel coronary artery disease. , 0, , . | | 0 |
| 111 | Optimization and comparison of derived Frank VECG lead systems employing an accurate thorax model. , 0, , . | | 1 |
| 112 | Software for acquisition of exercise test database. , 0, , . | | 0 |
| 113 | Blinded Analysis of an Exercise ECG Database Using High Frequency QRS Analysis. , 0, , . | | 1 |
| 114 | Nonlinear Effects of Winter Swimming and Sauna Recreational Activities on the Heart Rate Variability. , 0, , . | | 0 |