## Lionel Tarassenko

## List of Publications by Citations

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152 3,944 34 59 h-index g-index citations papers 5,206 170 5.44 5.5 L-index avg, IF ext. citations ext. papers

| #   | Paper  | IF            | Citations |
|-----|--|---------------|-----------|
| 152 | Non-contact video-based vital sign monitoring using ambient light and auto-regressive models. <i>Physiological Measurement</i> , <b>2014</b> , 35, 807-31  | 2.9           | 269       |
| 151 | Efficacy of self-monitored blood pressure, with or without telemonitoring, for titration of antihypertensive medication (TASMINH4): an unmasked randomised controlled trial. <i>Lancet, The</i> , <b>2018</b> , 391, 949-959 | 40            | 179       |
| 150 | Mobile Phone Text Messages to Support Treatment Adherence in Adults With High Blood Pressure (SMS-Text Adherence Support [StAR]): A Single-Blind, Randomized Trial. <i>Circulation</i> , <b>2016</b> , 133, 592-600          | 16.7          | 159       |
| 149 | Integrated monitoring and analysis for early warning of patient deterioration. <i>British Journal of Anaesthesia</i> , <b>2006</b> , 97, 64-8  | 5.4           | 149       |
| 148 | A Probabilistic Resource Allocating Network for Novelty Detection. <i>Neural Computation</i> , <b>1994</b> , 6, 270-28   | 8 <b>4</b> .9 | 146       |
| 147 | Feasibility of Obtaining Measures of Lifestyle From a Smartphone App: The MyHeart Counts Cardiovascular Health Study. <i>JAMA Cardiology</i> , <b>2017</b> , 2, 67-76  | 16.2          | 137       |
| 146 | Photoplethysmographic derivation of respiratory rate: a review of relevant physiology. <i>Journal of Medical Engineering and Technology</i> , <b>2012</b> , 36, 1-7  | 1.8           | 129       |
| 145 | Breathing Rate Estimation From the Electrocardiogram and Photoplethysmogram: A Review. <i>IEEE Reviews in Biomedical Engineering</i> , <b>2018</b> , 11, 2-20  | 6.4           | 128       |
| 144 | Application of independent component analysis in removing artefacts from the electrocardiogram. <i>Neural Computing and Applications</i> , <b>2006</b> , 15, 105-116   | 4.8           | 127       |
| 143 | A randomized controlled trial of the effect of real-time telemedicine support on glycemic control in young adults with type 1 diabetes (ISRCTN 46889446). <i>Diabetes Care</i> , <b>2005</b> , 28, 2697-702                  | 14.6          | 124       |
| 142 | Continuous non-contact vital sign monitoring in neonatal intensive care unit. <i>Healthcare Technology Letters</i> , <b>2014</b> , 1, 87-91  | 1.9           | 106       |
| 141 | Centile-based early warning scores derived from statistical distributions of vital signs. <i>Resuscitation</i> , <b>2011</b> , 82, 1013-8  | 4             | 97        |
| 140 | Non-contact measurement of oxygen saturation with an RGB camera. <i>Biomedical Optics Express</i> , <b>2015</b> , 6, 3320-38   | 3.5           | 84        |
| 139 | Using a mobile health application to support self-management in COPD: a qualitative study. <i>British Journal of General Practice</i> , <b>2014</b> , 64, e392-400   | 1.6           | 82        |
| 138 | A randomised controlled trial of the effect of continuous electronic physiological monitoring on the adverse event rate in high risk medical and surgical patients. <i>Anaesthesia</i> , <b>2006</b> , 61, 1031-9            | 6.6           | 82        |
| 137 | Telemedicine Technologies for Diabetes in Pregnancy: A Systematic Review and Meta-Analysis.<br>Journal of Medical Internet Research, <b>2016</b> , 18, e290  | 7.6           | 75        |
| 136 | Data fusion for estimating respiratory rate from a single-lead ECG. <i>Biomedical Signal Processing and Control</i> , <b>2013</b> , 8, 98-105  | 4.9           | 73        |

## (2012-2018)

| 135 | Comparing the Efficacy of a Mobile Phone-Based Blood Glucose Management System With Standard Clinic Care in Women With Gestational Diabetes: Randomized Controlled Trial. <i>JMIR MHealth and UHealth</i> , <b>2018</b> , 6, e71 | 5.5  | 72 |  |
|-----|--|------|----|--|
| 134 | SMARTHealth India: Development and Field Evaluation of a Mobile Clinical Decision Support System for Cardiovascular Diseases in Rural India. <i>JMIR MHealth and UHealth</i> , <b>2014</b> , 2, e54                              | 5.5  | 65 |  |
| 133 | Novelty Detection with Multivariate Extreme Value Statistics. <i>Journal of Signal Processing Systems</i> , <b>2011</b> , 65, 371-389  | 1.4  | 62 |  |
| 132 | A new approach to the analysis of the human sleep/wakefulness continuum. <i>Journal of Sleep Research</i> , <b>1996</b> , 5, 201-10  | 5.8  | 62 |  |
| 131 | Exacerbations in Chronic Obstructive Pulmonary Disease: Identification and Prediction Using a Digital Health System. <i>Journal of Medical Internet Research</i> , <b>2017</b> , 19, e69   | 7.6  | 62 |  |
| 130 | Acceptability and user satisfaction of a smartphone-based, interactive blood glucose management system in women with gestational diabetes mellitus. <i>Journal of Diabetes Science and Technology</i> , <b>2015</b> , 9, 111-5   | 4.1  | 60 |  |
| 129 | Self-Management Support Using a Digital Health System Compared With Usual Care for Chronic Obstructive Pulmonary Disease: Randomized Controlled Trial. <i>Journal of Medical Internet Research</i> , <b>2017</b> , 19, e144      | 7.6  | 58 |  |
| 128 | Using a mobile health application to support self-management in chronic obstructive pulmonary disease: a six-month cohort study. <i>BMC Medical Informatics and Decision Making</i> , <b>2015</b> , 15, 46                       | 3.6  | 54 |  |
| 127 | Digital health system for personalised COPD long-term management. <i>BMC Medical Informatics and Decision Making</i> , <b>2017</b> , 17, 19  | 3.6  | 49 |  |
| 126 | A personalised mobile-based home monitoring system for heart failure: The SUPPORT-HF Study. <i>International Journal of Medical Informatics</i> , <b>2015</b> , 84, 743-53   | 5.3  | 45 |  |
| 125 | Development of a real-time smartphone solution for the management of women with or at high risk of gestational diabetes. <i>Journal of Diabetes Science and Technology</i> , <b>2014</b> , 8, 1105-14                            | 4.1  | 41 |  |
| 124 | Novelty detection for the identification of abnormalities. <i>International Journal of Systems Science</i> , <b>2000</b> , 31, 1427-1439   | 2.3  | 41 |  |
| 123 | Self-Management of Postnatal Hypertension: The SNAP-HT Trial. <i>Hypertension</i> , <b>2018</b> , 72, 425-432  | 8.5  | 38 |  |
| 122 | Non-contact physiological monitoring of preterm infants in the Neonatal Intensive Care Unit. <i>Npj Digital Medicine</i> , <b>2019</b> , 2, 128  | 15.7 | 37 |  |
| 121 | Multi-Task Convolutional Neural Network for Patient Detection and Skin Segmentation in Continuous Non-Contact Vital Sign Monitoring <b>2017</b> ,  |      | 35 |  |
| 120 | 'Errors' and omissions in paper-based early warning scores: the association with changes in vital signsa database analysis. <i>BMJ Open</i> , <b>2015</b> , 5, e007376   | 3    | 34 |  |
| 119 | Characterizing artefact in the normal human 24-hour RR time series to aid identification and artificial replication of circadian variations in human beat to beat heart rate using a simple threshold                            |      | 34 |  |
| 118 | Testing of Wearable Monitors in a Real-World Hospital Environment: What Lessons Can Be Learnt? <b>2012</b> ,   |      | 28 |  |

| 117 | Implementation of telehealth support for patients with type 2 diabetes using insulin treatment: an exploratory study. <i>Journal of Innovation in Health Informatics</i> , <b>2009</b> , 17, 47-53   |               | 27 |
|-----|--|---------------|----|
| 116 | SMARThealth India: A stepped-wedge, cluster randomised controlled trial of a community health worker managed mobile health intervention for people assessed at high cardiovascular disease risk in rural India. <i>PLoS ONE</i> , <b>2019</b> , 14, e0213708 | 3.7           | 25 |
| 115 | An Extreme Function Theory for Novelty Detection. <i>IEEE Journal on Selected Topics in Signal Processing</i> , <b>2013</b> , 7, 28-37   | 7.5           | 25 |
| 114 | Neural network models for breast cancer prognosis. <i>Neural Computing and Applications</i> , <b>1998</b> , 7, 367-3   | <b>75</b> 4.8 | 24 |
| 113 | Accelerometry-Based Estimation of Respiratory Rate for Post-Intensive Care Patient Monitoring. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 4981-4989   | 4             | 24 |
| 112 | Manual centile-based early warning scores derived from statistical distributions of observational vital-sign data. <i>Resuscitation</i> , <b>2018</b> , 129, 55-60   | 4             | 23 |
| 111 | Respiratory rate estimation during triage of children in hospitals. <i>Journal of Medical Engineering and Technology</i> , <b>2015</b> , 39, 514-24  | 1.8           | 23 |
| 110 | Trajectories of vital signs in patients with COVID-19. <i>Resuscitation</i> , <b>2020</b> , 156, 99-106  | 4             | 23 |
| 109 | Predicting in-hospital mortality and unanticipated admissions to the intensive care unit using routinely collected blood tests and vital signs: Development and validation of a multivariable model. <i>Resuscitation</i> , <b>2018</b> , 133, 75-81         | 4             | 23 |
| 108 | Self-management support using an Internet-linked tablet computer (the EDGE platform)-based intervention in chronic obstructive pulmonary disease: protocol for the EDGE-COPD randomised controlled trial. <i>BMJ Open</i> , <b>2014</b> , 4, e004437         | 3             | 22 |
| 107 | Method for generating an artificial RR tachogram of a typical healthy human over 24-hours  |               | 22 |
| 106 | The Mobile-Based 6-Minute Walk Test: Usability Study and Algorithm Development and Validation.  JMIR MHealth and UHealth, <b>2020</b> , 8, e13756  | 5.5           | 22 |
| 105 | Track and trigger in an emergency department: an observational evaluation study. <i>Emergency Medicine Journal</i> , <b>2013</b> , 30, 186-91  | 1.5           | 21 |
| 104 | Blood pressure monitoring in high-risk pregnancy to improve the detection and monitoring of hypertension (the BUMP 1 and 2 trials): protocol for two linked randomised controlled trials. <i>BMJ Open</i> , <b>2020</b> , 10, e034593                        | 3             | 19 |
| 103 | Non-Contact Monitoring of Respiration in the Neonatal Intensive Care Unit 2017,  |               | 18 |
| 102 | The digital patient. Clinical Medicine, 2013, 13, 252-7  | 1.9           | 18 |
| 101 | Automated signal quality assessment of mobile phone-recorded heart sound signals. <i>Journal of Medical Engineering and Technology</i> , <b>2016</b> , 40, 342-355   | 1.8           | 18 |
| 100 | Physical activity, sleep and cardiovascular health data for 50,000 individuals from the MyHeart Counts Study. <i>Scientific Data</i> , <b>2019</b> , 6, 24   | 8.2           | 17 |

## (2015-2015)

| 99 | The relationship between symptoms and blood pressure during maintenance hemodialysis. <i>Hemodialysis International</i> , <b>2015</b> , 19, 543-52  | 1.7 | 17 |  |
|----|---|-----|----|--|
| 98 | Validation of Instantaneous Respiratory Rate Using Reflectance PPG from Different Body Positions. <i>Sensors</i> , <b>2018</b> , 18,  | 3.8 | 17 |  |
| 97 | A two-class approach to the detection of physiological deterioration in patient vital signs, with clinical label refinement. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2012</b> , 16, 1231-8   |     | 16 |  |
| 96 | Using the Medical Research Council framework for development and evaluation of complex interventions in a low resource setting to develop a theory-based treatment support intervention delivered via SMS text message to improve blood pressure control. <i>BMC Health Services Research</i> ,     | 2.9 | 15 |  |
| 95 | Extending the Generalised Pareto Distribution for Novelty Detection in High-Dimensional Spaces.<br>Journal of Signal Processing Systems, <b>2014</b> , 74, 323-339  | 1.4 | 15 |  |
| 94 | Cardio-respiratory signal extraction from video camera data for continuous non-contact vital sign monitoring using deep learning. <i>Physiological Measurement</i> , <b>2019</b> , 40, 115001   | 2.9 | 14 |  |
| 93 | Trial protocol to compare the efficacy of a smartphone-based blood glucose management system with standard clinic care in the gestational diabetic population. <i>BMJ Open</i> , <b>2016</b> , 6, e009702   | 3   | 14 |  |
| 92 | Signal quality classification of mobile phone-recorded phonocardiogram signals 2014,  |     | 13 |  |
| 91 | Probabilistic approach to the condition monitoring of aerospace engines. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , <b>2009</b> , 223, 533-541   | 0.9 | 13 |  |
| 90 | Non-invasive measurement of respiratory rate in children using the photoplethysmogram. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2008</b> , 2008, 1886-9 | 0.9 | 13 |  |
| 89 | Quantitative assessment of respiratory derivation algorithms  |     | 13 |  |
| 88 | Early warning score adjusted for age to predict the composite outcome of mortality, cardiac arrest or unplanned intensive care unit admission using observational vital-sign data: a multicentre development and validation. <i>BMJ Open</i> , <b>2019</b> , 9, e033301                             | 3   | 12 |  |
| 87 | An impedance pneumography signal quality index: Design, assessment and application to respiratory rate monitoring. <i>Biomedical Signal Processing and Control</i> , <b>2021</b> , 65, 102339   | 4.9 | 12 |  |
| 86 | Gaussian process clustering for the functional characterisation of vital-sign trajectories 2013,  |     | 11 |  |
| 85 | Machine learning and software engineering in health informatics 2012,   |     | 11 |  |
| 84 | The effect of fractional inspired oxygen concentration on early warning score performance: A database analysis. <i>Resuscitation</i> , <b>2019</b> , 139, 192-199   | 4   | 10 |  |
| 83 | Assessment of Signal Processing Methods for Measuring the Respiratory Rate in the Neonatal Intensive Care Unit. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2019</b> , 23, 2335-2346  | 7.2 | 10 |  |
| 82 | Implications of Cardiovascular Disease Risk Assessment Using the WHO/ISH Risk Prediction Charts in Rural India. <i>PLoS ONE</i> , <b>2015</b> , 10, e0133618  | 3.7 | 10 |  |

| 81 | Wearability Testing of Ambulatory Vital Sign Monitoring Devices: Prospective Observational Cohort Study. <i>JMIR MHealth and UHealth</i> , <b>2020</b> , 8, e20214   | 5.5  | 10 |
|----|--|------|----|
| 80 | Self-reported and objectively measured physical activity in people with and without chronic heart failure: UK Biobank analysis. <i>Open Heart</i> , <b>2020</b> , 7, e001099   | 3    | 9  |
| 79 | Personalized alerts for patients with COPD using pulse oximetry and symptom scores. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 3164-7 | 0.9  | 9  |
| 78 | Protocol for a prospective, controlled, cross-sectional, diagnostic accuracy study to evaluate the specificity and sensitivity of ambulatory monitoring systems in the prompt detection of hypoxia and during movement. <i>BMJ Open</i> , <b>2020</b> , 10, e034404                              | 3    | 9  |
| 77 | Vital-sign circadian rhythms in patients prior to discharge from an ICU: a retrospective observational analysis of routinely recorded physiological data. <i>Critical Care</i> , <b>2020</b> , 24, 181   | 10.8 | 8  |
| 76 | Detection of Ectopic Beats in the Electrocardiogram Using an Auto-Associative Neural Network. <i>Neural Processing Letters</i> , <b>2001</b> , 14, 15-25   | 2.4  | 8  |
| 75 | Home monitoring with technology-supported management in chronic heart failure: a randomised trial. <i>Heart</i> , <b>2020</b> , 106, 1573-1578   | 5.1  | 8  |
| 74 | Creating connections - the development of a mobile-health monitoring system for heart failure: Qualitative findings from a usability cohort study. <i>Digital Health</i> , <b>2016</b> , 2, 2055207616671461   | 4    | 8  |
| 73 | Estimation of respiratory rate from motion contaminated photoplethysmography signals incorporating accelerometry. <i>Healthcare Technology Letters</i> , <b>2019</b> , 6, 19-26  | 1.9  | 7  |
| 72 | Artificial intelligence in health care: enabling informed care. <i>Lancet, The</i> , <b>2018</b> , 391, 1260   | 40   | 7  |
| 71 | Spectral fusion for estimating respiratory rate from the ECG 2009,   |      | 7  |
| 70 | Novelty Detection 2008,  |      | 7  |
| 69 | On-chip learning with analogue VLSI neural networks. <i>International Journal of Neural Systems</i> , <b>1993</b> , 4, 419-26  | 6.2  | 7  |
| 68 | Circadian Blood Pressure Variations Computed From 1.7 Million Measurements in an Acute Hospital Setting. <i>American Journal of Hypertension</i> , <b>2019</b> , 32, 1154-1161   | 2.3  | 6  |
| 67 | Pregnancy physiology pattern prediction study (4P study): protocol of an observational cohort study collecting vital sign information to inform the development of an accurate centile-based obstetric early warning score. <i>BMJ Open</i> , <b>2017</b> , 7, e016034                           | 3    | 6  |
| 66 | Novelty detection with multivariate Extreme Value Theory, part II: An analytical approach to unimodal estimation <b>2009</b> ,   |      | 6  |
| 65 | Neural network prediction of relapse in breast cancer patients. <i>Neural Computing and Applications</i> , <b>1996</b> , 4, 105-113  | 4.8  | 6  |
| 64 | Pulse arrival time as a surrogate of blood pressure. <i>Scientific Reports</i> , <b>2021</b> , 11, 22767   | 4.9  | 6  |

| 63 | Probabilistic detection of vital sign abnormality with Gaussian process regression 2012,  |      | 5 |
|----|---|------|---|
| 62 | Learning with analogue VLSP MLPs  |      | 5 |
| 61 | Mobile Messaging Support Versus Usual Care for People With Type 2 Diabetes on Glycemic Control: Protocol for a Multicenter Randomized Controlled Trial. <i>JMIR Research Protocols</i> , <b>2019</b> , 8, e12377  | 2    | 5 |
| 60 | Mood Monitoring Over One Year for People With Chronic Obstructive Pulmonary Disease Using a Mobile Health System: Retrospective Analysis of a Randomized Controlled Trial. <i>JMIR MHealth and UHealth</i> , <b>2019</b> , 7, e14946                      | 5.5  | 5 |
| 59 | Non-contact vital-sign monitoring of patients undergoing haemodialysis treatment. <i>Scientific Reports</i> , <b>2020</b> , 10, 18529   | 4.9  | 5 |
| 58 | Day-to-day progression of vital-sign circadian rhythms in the intensive care unit. <i>Critical Care</i> , <b>2021</b> , 25, 156   | 10.8 | 5 |
| 57 | Digital blood glucose monitoring could provide new objective assessments of blood glucose control in women with gestational diabetes. <i>Diabetic Medicine</i> , <b>2016</b> , 33, 1598-1599  | 3.5  | 5 |
| 56 | Supporting people with type 2 diabetes in effective use of their medicine through mobile health technology integrated with clinical care (SuMMiT-D Feasibility): a randomised feasibility trial protocol. <i>BMJ Open</i> , <b>2019</b> , 9, e033504      | 3    | 5 |
| 55 | Non-Contact Assessment of Peripheral Artery Haemodynamics Using Infrared Video Thermography. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2021</b> , 68, 276-288   | 5    | 5 |
| 54 | Optimizing a digital intervention for managing blood pressure in stroke patients using a diverse sample: Integrating the person-based approach and patient and public involvement. <i>Health Expectations</i> , <b>2021</b> , 24, 327-340                 | 3.7  | 5 |
| 53 | Clinical Implications of the NICE 2015 Criteria for Gestational Diabetes Mellitus. <i>Journal of Clinical Medicine</i> , <b>2018</b> , 7,   | 5.1  | 5 |
| 52 | Validation of Modelflow Estimates of Cardiac Output in Hemodialysis Patients. <i>Therapeutic Apheresis and Dialysis</i> , <b>2018</b> , 22, 337-344   | 1.9  | 4 |
| 51 | Novelty detection with multivariate Extreme Value Theory, part I: A numerical approach to multimodal estimation <b>2009</b> ,   |      | 4 |
| 50 | BioSleep: a comprehensive sleep analysis system   |      | 4 |
| 49 | Early risk assessment for COVID-19 patients from emergency department data using machine learning   |      | 4 |
| 48 | Automated identification of abnormal cardiotocograms using neural network visualization techniques  |      | 4 |
| 47 | Screening for Hypertension in the INpatient Environment(SHINE): a protocol for a prospective study of diagnostic accuracy among adult hospital patients. <i>BMJ Open</i> , <b>2019</b> , 9, e033792   | 3    | 4 |
| 46 | Smoothing Effect in Vital Sign Recordings: Fact or Fiction? A Retrospective Cohort Analysis of Manual and Continuous Vital Sign Measurements to Assess Data Smoothing in Postoperative Care. <i>Anesthesia and Analgesia</i> , <b>2018</b> , 127, 960-966 | 3.9  | 4 |

| 45 | Non-invasive stroke volume estimation by transthoracic electrical bioimpedance Doppler echocardiography in healthy volunteers. <i>Journal of Medical Engineering and Technology</i> , <b>2019</b> , 43, 33-37   | 1.8  | 3 |
|----|---|------|---|
| 44 | Automated method for detecting and reading seven-segment digits from images of blood glucose metres and blood pressure monitors. <i>Journal of Medical Engineering and Technology</i> , <b>2019</b> , 43, 341-355   | 1.8  | 3 |
| 43 | Use of wearable monitoring devices to change health behavior. <i>JAMA - Journal of the American Medical Association</i> , <b>2015</b> , 313, 1864-5   | 27.4 | 3 |
| 42 | A comparison of approaches to multivariate extreme value theory for novelty detection 2009,   |      | 3 |
| 41 | Modelling effects of sotalol on T-wave morphology 2007,   |      | 3 |
| 40 | Automated detection of sleep-boundary times using wrist-worn accelerometry  |      | 3 |
| 39 | Monitoring activity of hip injury patients (MoHIP): a sub-study of the World Hip Trauma Evaluation observational cohort study. <i>Pilot and Feasibility Studies</i> , <b>2020</b> , 6, 70   | 1.9  | 3 |
| 38 | Toward a Multivariate Prediction Model of Pharmacological Treatment for Women With Gestational Diabetes Mellitus: Algorithm Development and Validation. <i>Journal of Medical Internet Research</i> , <b>2021</b> , 23, e21435  | 7.6  | 3 |
| 37 | Pinning the tail on the distribution: A multivariate extension to the generalised Pareto distribution <b>2011</b> ,   |      | 2 |
| 36 | Learning pronunciation with the Visual ear. Neural Computing and Applications, 1993, 1, 169-175   | 4.8  | 2 |
| 35 | App-Based Versus Standard Six-Minute Walk Test in Pulmonary Hypertension: Mixed Methods Study. <i>JMIR MHealth and UHealth</i> , <b>2021</b> , 9, e22748  | 5.5  | 2 |
| 34 | Experiences of current vital signs monitoring practices and views of wearable monitoring: A qualitative study in patients and nurses. <i>Journal of Advanced Nursing</i> , <b>2021</b> ,  | 3.1  | 2 |
| 33 | Technology-supported home monitoring in heart failure patients. European Heart Journal, 2020, 41,   | 9.5  | 2 |
| 32 | OxCOVID19 Database, a multimodal data repository for better understanding the global impact of COVID-19. <i>Scientific Reports</i> , <b>2021</b> , 11, 9237   | 4.9  | 2 |
| 31 | Vision-Based Patient Monitoring and Management in Mental Health Settings. <i>Journal of Clinical Engineering</i> , <b>2021</b> , 46, 36-43  | 0.4  | 2 |
| 30 | The impact of wearable continuous vital sign monitoring on deterioration detection and clinical outcomes in hospitalised patients: a systematic review and meta-analysis. <i>Critical Care</i> , <b>2021</b> , 25, 351  | 10.8 | 2 |
| 29 | Effect of Self-monitoring of Blood Pressure on Blood Pressure Control in Pregnant Individuals With Chronic or Gestational Hypertension: The BUMP 2 Randomized Clinical Trial <i>JAMA - Journal of the American Medical Association</i> , <b>2022</b> , 327, 1666-1678 | 27.4 | 2 |
| 28 | Study protocol for an exploratory interventional study investigating the feasibility of video-based non-contact physiological monitoring in healthy volunteers by Mapping Of Lower Limb skIn pErfusion (MOLLIE). <i>BMJ Open</i> , <b>2020</b> , 10, e036235          | 3    | 1 |

| 27 | Fusing conventional ECG QRS detection algorithms with an auto-associative neural network for the detection of ectopic beats   |      | 1 |
|----|---|------|---|
| 26 | Neural Networks for Mobile Robot Localisation using Infra-Red Range Sensing. <i>Neural Computing and Applications</i> , <b>1999</b> , 8, 114-134  | 4.8  | 1 |
| 25 | PERTURBATION TECHNIQUES FOR ON-CHIP LEARNING WITH ANALOGUE VLSI MLPs. <i>Journal of Circuits, Systems and Computers</i> , <b>1996</b> , 06, 93-113  | 0.9  | 1 |
| 24 | The Use of Wearable Pulse Oximeters in the Prompt Detection of Hypoxemia and During Movement: Diagnostic Accuracy Study <i>Journal of Medical Internet Research</i> , <b>2022</b> , 24, e28890  | 7.6  | 1 |
| 23 | Non-contact physiological monitoring of post-operative patients in the intensive care unit <i>Npj Digital Medicine</i> , <b>2022</b> , 5, 4   | 15.7 | 1 |
| 22 | A Survey of Mobile Phone Sensing, Self-Reporting, and Social Sharing for Pervasive Healthcare   |      | 1 |
| 21 | Wearability Testing of Ambulatory Vital Sign Monitoring Devices: Prospective Observational Cohort Study (Preprint)  |      | 1 |
| 20 | Digital messaging to support control for type 2 diabetes (StAR2D): a multicentre randomised controlled trial. <i>BMC Public Health</i> , <b>2021</b> , 21, 1907   | 4.1  | 1 |
| 19 | Impact of Electronic Versus Paper Vital Sign Observations on Length of Stay in Trauma Patients: Stepped-Wedge, Cluster Randomized Controlled Trial. <i>JMIR Medical Informatics</i> , <b>2018</b> , 6, e10221   | 3.6  | 1 |
| 18 | Early detection of physiological deterioration in post-surgical patients using wearable technology combined with an integrated monitoring system: a pre- and post-interventional study  |      | 1 |
| 17 | System Architecture for "Support Through Mobile Messaging and Digital Health Technology for Diabetes" (SuMMiT-D): Design and Performance in Pilot and Randomized Controlled Feasibility Studies. <i>JMIR Formative Research</i> , <b>2021</b> , 5, e18460 | 2.5  | 1 |
| 16 | Wearable pulse oximeters in the prompt detection of hypoxaemia and during movement: a diagnostic accuracy study (Preprint)  |      | 1 |
| 15 | Protocol for a systematic review assessing ambulatory vital sign monitoring impact on deterioration detection and related clinical outcomes in hospitalised patients. <i>BMJ Open</i> , <b>2021</b> , 11, e047  | 715  | 1 |
| 14 | Estimated Prevalence of Hypertension and Undiagnosed Hypertension in a Large Inpatient Population: A Cross-sectional Observational Study. <i>American Journal of Hypertension</i> , <b>2021</b> , 34, 963-972   | 2.3  | 1 |
| 13 | A new method to measure inter-breath intervals in infants for the assessment of apnoea and respiratory dynamics   |      | 1 |
| 12 | What lies downstream: Cellular oxygen delivery during hemodialysis. <i>Seminars in Dialysis</i> , <b>2019</b> , 32, 232-2   | 236  | 1 |
| 11 | Non-contact vital sign monitoring of patients in an intensive care unit: A human factors analysis of staff expectations. <i>Applied Ergonomics</i> , <b>2021</b> , 90, 103149   | 4.2  | 1 |
| 10 | A Chest Patch for Continuous Vital Sign Monitoring: Clinical Validation Study During Movement and Controlled Hypoxia (Preprint)   |      | 1 |

| 9 | A Real-Time Wearable System for Monitoring Vital Signs of COVID-19 Patients in a Hospital Setting. <i>Frontiers in Digital Health</i> , <b>2021</b> , 3, 630273   | 2.3  | 1 |
|---|---|------|---|
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