

# Nigel H Lovell

## List of Publications by Citations

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486  
papers

11,844  
citations

51  
h-index

93  
g-index

533  
ext. papers

14,101  
ext. citations

3.3  
avg, IF

6.52  
L-index

#	Paper	IF	Citations
486	Implementation of a real-time human movement classifier using a triaxial accelerometer for ambulatory monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2006</b> , 10, 156-67		812
485	Conducting polymers for neural interfaces: challenges in developing an effective long-term implant. <i>Biomaterials</i> , <b>2008</b> , 29, 3393-9	15.6	609
484	Accelerometry: providing an integrated, practical method for long-term, ambulatory monitoring of human movement. <i>Physiological Measurement</i> , <b>2004</b> , 25, R1-20	2.9	555
483	A review of tactile sensing technologies with applications in biomedical engineering. <i>Sensors and Actuators A: Physical</i> , <b>2012</b> , 179, 17-31	3.9	441
482	Classification of basic daily movements using a triaxial accelerometer. <i>Medical and Biological Engineering and Computing</i> , <b>2004</b> , 42, 679-87	3.1	300
481	Cell attachment functionality of bioactive conducting polymers for neural interfaces. <i>Biomaterials</i> , <b>2009</b> , 30, 3637-44	15.6	222
480	Barometric pressure and triaxial accelerometry-based falls event detection. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2010</b> , 18, 619-27	4.8	218
479	Sensors-Based Wearable Systems for Monitoring of Human Movement and Falls. <i>IEEE Sensors Journal</i> , <b>2012</b> , 12, 658-670	4	179
478	Organic electrode coatings for next-generation neural interfaces. <i>Frontiers in Neuroengineering</i> , <b>2014</b> , 7, 15		171
477	Detection of daily physical activities using a triaxial accelerometer. <i>Medical and Biological Engineering and Computing</i> , <b>2003</b> , 41, 296-301	3.1	166
476	Impact of co-incorporating laminin peptide dopants and neurotrophic growth factors on conducting polymer properties. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 63-71	10.8	153
475	The use of photoplethysmography for assessing hypertension. <i>Npj Digital Medicine</i> , <b>2019</b> , 2, 60	15.7	147
474	Substrate dependent stability of conducting polymer coatings on medical electrodes. <i>Biomaterials</i> , <b>2012</b> , 33, 5875-86	15.6	147
473	Conductive hydrogels: mechanically robust hybrids for use as biomaterials. <i>Macromolecular Bioscience</i> , <b>2012</b> , 12, 494-501	5.5	147
472	Using information technology to improve the management of chronic disease. <i>Medical Journal of Australia</i> , <b>2003</b> , 179, 242-6	4	128
471	Classification of a known sequence of motions and postures from accelerometry data using adapted Gaussian mixture models. <i>Physiological Measurement</i> , <b>2006</b> , 27, 935-51	2.9	121
470	Tracking the Evolution of Smartphone Sensing for Monitoring Human Movement. <i>Sensors</i> , <b>2015</b> , 15, 1890-1833	15.3	120

469	CMOS neurostimulation ASIC with 100 channels, scaleable output, and bidirectional radio-frequency telemetry. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2001</b> , 48, 248-60	5	120
468	Focal activation of the feline retina via a suprachoroidal electrode array. <i>Vision Research</i> , <b>2009</b> , 49, 825-33.	11	116
467	Remote monitoring of health status of the elderly at home. A multidisciplinary project on aging at the University of New South Wales. <i>International Journal of Bio-medical Computing</i> , <b>1995</b> , 40, 147-55		114
466	Ion currents underlying sinoatrial node pacemaker activity: a new single cell mathematical model. <i>Journal of Theoretical Biology</i> , <b>1996</b> , 181, 245-72	2.3	112
465	Patients' perceptions of a home telecare system. <i>International Journal of Medical Informatics</i> , <b>2008</b> , 77, 486-98	5.3	109
464	A pilot study of long-term monitoring of human movements in the home using accelerometry. <i>Journal of Telemedicine and Telecare</i> , <b>2004</b> , 10, 144-51	6.8	107
463	Simulating prosthetic vision: I. Visual models of phosphenes. <i>Vision Research</i> , <b>2009</b> , 49, 1493-506	2.1	98
462	Direct activation and temporal response properties of rabbit retinal ganglion cells following subretinal stimulation. <i>Journal of Neurophysiology</i> , <b>2009</b> , 102, 2982-93	3.2	94
461	Signal quality measures for pulse oximetry through waveform morphology analysis. <i>Physiological Measurement</i> , <b>2011</b> , 32, 369-84	2.9	90
460	Wearable Sensing and Telehealth Technology with Potential Applications in the Coronavirus Pandemic. <i>IEEE Reviews in Biomedical Engineering</i> , <b>2021</b> , 14, 48-70	6.4	86
459	Wearable pendant device monitoring using new wavelet-based methods shows daily life and laboratory gaits are different. <i>Medical and Biological Engineering and Computing</i> , <b>2016</b> , 54, 663-74	3.1	84
458	Erratum to "Optimisation of a Generic Ionic Model of Cardiac Myocyte Electrical Activity" <i>Computational and Mathematical Methods in Medicine</i> , <b>2013</b> , 2013, 1-1	2.8	78
457	Longitudinal falls-risk estimation using triaxial accelerometry. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 534-41	5	73
456	Developments in control systems for rotary left ventricular assist devices for heart failure patients: a review. <i>Physiological Measurement</i> , <b>2013</b> , 34, R1-27	2.9	71
455	Estimating cognitive workload using wavelet entropy-based features during an arithmetic task. <i>Computers in Biology and Medicine</i> , <b>2013</b> , 43, 2186-95	7	69
454	Parameter estimation in cardiac ionic models. <i>Progress in Biophysics and Molecular Biology</i> , <b>2004</b> , 85, 407-31	7.1	68
453	Retinal neurostimulator for a multifocal vision prosthesis. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2007</b> , 15, 425-34	4.8	67
452	The potential impact of home telecare on clinical practice. <i>Medical Journal of Australia</i> , <b>1999</b> , 171, 518-21	11	67

451	From A to Z: Wearable technology explained. <i>Maturitas</i> , <b>2018</b> , 113, 40-47	5	66
450	Evaluation of stimulus parameters and electrode geometry for an effective suprachoroidal retinal prosthesis. <i>Journal of Neural Engineering</i> , <b>2010</b> , 7, 036008	5	65
449	Current steering in retinal stimulation via a quasimonopolar stimulation paradigm <b>2013</b> , 54, 4307-20		58
448	A web-based approach for electrocardiogram monitoring in the home. <i>International Journal of Medical Informatics</i> , <b>1999</b> , 54, 145-53	5.3	56
447	Development of bioactive conducting polymers for neural interfaces. <i>Expert Review of Medical Devices</i> , <b>2010</b> , 7, 35-49	3.5	55
446	Novel neural interface for implant electrodes: improving electroactivity of polypyrrole through MWNT incorporation. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2008</b> , 19, 1625-9	4.5	55
445	Bionic vision: system architectures: a review. <i>Expert Review of Medical Devices</i> , <b>2012</b> , 9, 33-48	3.5	54
444	Electrocardiogram signal quality measures for unsupervised telehealth environments. <i>Physiological Measurement</i> , <b>2012</b> , 33, 1517-33	2.9	54
443	Beyond Subjective Self-Rating: EEG Signal Classification of Cognitive Workload. <i>IEEE Transactions on Autonomous Mental Development</i> , <b>2015</b> , 7, 301-310		53
442	Visual acuity measurement of prosthetic vision: a virtual-reality simulation study. <i>Journal of Neural Engineering</i> , <b>2005</b> , 2, S135-45	5	53
441	Predicting the risk of exacerbation in patients with chronic obstructive pulmonary disease using home telehealth measurement data. <i>Artificial Intelligence in Medicine</i> , <b>2015</b> , 63, 51-9	7.4	52
440	Theoretical foundations of a Starling-like controller for rotary blood pumps. <i>Artificial Organs</i> , <b>2012</b> , 36, 787-96	2.6	52
439	Parameter-optimized model of cardiovascular-rotary blood pump interactions. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 254-66	5	52
438	Quaternion-Based Complementary Filter for Attitude Determination of a Smartphone. <i>IEEE Sensors Journal</i> , <b>2016</b> , 16, 6008-6017	4	52
437	QRS Detection Algorithm for Telehealth Electrocardiogram Recordings. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2016</b> , 63, 1377-88	5	52
436	A comparison of activity classification in younger and older cohorts using a smartphone. <i>Physiological Measurement</i> , <b>2014</b> , 35, 2269-86	2.9	51
435	Attaining higher resolution visual prosthetics: a review of the factors and limitations. <i>Journal of Neural Engineering</i> , <b>2013</b> , 10, 011002	5	51
434	Characterization of a capacitive tactile shear sensor for application in robotic and upper limb prostheses. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 165, 164-172	3.9	51

433	Homecare Robotic Systems for Healthcare 4.0: Visions and Enabling Technologies. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2020</b> , 24, 2535-2549	7.2	45
432	In vitro biocompatibility of various polymer-based microelectrode arrays for retinal prosthesis <b>2012</b> , 53, 2653-7		44
431	Simulating prosthetic vision: II. Measuring functional capacity. <i>Vision Research</i> , <b>2009</b> , 49, 2329-43	2.1	43
430	Identification and classification of physiologically significant pumping states in an implantable rotary blood pump. <i>Artificial Organs</i> , <b>2006</b> , 30, 671-9	2.6	43
429	Assessing fall risk using wearable sensors: a practical discussion. A review of the practicalities and challenges associated with the use of wearable sensors for quantification of fall risk in older people. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , <b>2012</b> , 45, 694-706	2.7	42
428	Change in pulse transit time and pre-ejection period during head-up tilt-induced progressive central hypovolaemia. <i>Journal of Clinical Monitoring and Computing</i> , <b>2007</b> , 21, 283-93	2	42
427	Low-Power Fall Detector Using Triaxial Accelerometry and Barometric Pressure Sensing. <i>IEEE Transactions on Industrial Informatics</i> , <b>2016</b> , 12, 2302-2311	11.9	41
426	A bidomain model of epiretinal stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2005</b> , 13, 137-46	4.8	41
425	Activation of retinal ganglion cells following epiretinal electrical stimulation with hexagonally arranged bipolar electrodes. <i>Journal of Neural Engineering</i> , <b>2011</b> , 8, 035004	5	40
424	Conductive elastomer composites for fully polymeric, flexible bioelectronics. <i>Biomaterials Science</i> , <b>2019</b> , 7, 1372-1385	7.4	39
423	Responses of retinal ganglion cells to extracellular electrical stimulation, from single cell to population: model-based analysis. <i>PLoS ONE</i> , <b>2012</b> , 7, e53357	3.7	39
422	Noninvasive average flow estimation for an implantable rotary blood pump: a new algorithm incorporating the role of blood viscosity. <i>Artificial Organs</i> , <b>2007</b> , 31, 45-52	2.6	39
421	Web-based acquisition, storage, and retrieval of biomedical signals. <i>IEEE Engineering in Medicine and Biology Magazine</i> , <b>2001</b> , 20, 38-44		39
420	Starling-like flow control of a left ventricular assist device: in vitro validation. <i>Artificial Organs</i> , <b>2014</b> , 38, E46-56	2.6	38
419	Sensorless flow and head estimation in the VentrAssist rotary blood pump. <i>Artificial Organs</i> , <b>2000</b> , 24, 585-8	2.6	37
418	Low-power technologies for wearable telecare and telehealth systems: A review. <i>Biomedical Engineering Letters</i> , <b>2015</b> , 5, 1-9	3.6	36
417	Cuffless Single-Site Photoplethysmography for Blood Pressure Monitoring. <i>Journal of Clinical Medicine</i> , <b>2020</b> , 9,	5.1	36
416	Review: Are we stumbling in our quest to find the best predictor? Over-optimism in sensor-based models for predicting falls in older adults. <i>Healthcare Technology Letters</i> , <b>2015</b> , 2, 79-88	1.9	35

415	Differences Between Gait on Stairs and Flat Surfaces in Relation to Fall Risk and Future Falls. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2017</b> , 21, 1479-1486	7.2	34
414	Advances in Sweat Wearables: Sample Extraction, Real-Time Biosensing, and Flexible Platforms. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 34337-34361	9.5	34
413	Design of a decision-support architecture for management of remotely monitored patients. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 1216-26		34
412	The bionic eye (electronic visual prosthesis): a review. <i>Australian and New Zealand Journal of Ophthalmology</i> , <b>1998</b> , 26, 195-202		34
411	Accelerometry based classification of walking patterns using time-frequency analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 4899-902		34
410	Non-invasive classification of severe sepsis and systemic inflammatory response syndrome using a nonlinear support vector machine: a preliminary study. <i>Physiological Measurement</i> , <b>2010</b> , 31, 775-93	2.9	33
409	Spectral analysis of finger photoplethysmographic waveform variability in a model of mild to moderate haemorrhage. <i>Journal of Clinical Monitoring and Computing</i> , <b>2008</b> , 22, 343-53	2	33
408	Can mHealth Technology Help Mitigate the Effects of the COVID-19 Pandemic?. <i>IEEE Open Journal of Engineering in Medicine and Biology</i> , <b>2020</b> , 1, 243-248	5.9	33
407	Multimodal Capacitive and Piezoresistive Sensor for Simultaneous Measurement of Multiple Forces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 22179-22190	9.5	32
406	Exercise studies in patients with rotary blood pumps: cause, effects, and implications for startling-like control of changes in pump flow. <i>Artificial Organs</i> , <b>2013</b> , 37, 695-703	2.6	32
405	Contribution of arterial Windkessel in low-frequency cerebral hemodynamics during transient changes in blood pressure. <i>Journal of Applied Physiology</i> , <b>2011</b> , 110, 917-25	3.7	32
404	Encoding of tangential torque in responses of tactile afferent fibres innervating the fingerpad of the monkey. <i>Journal of Physiology</i> , <b>2010</b> , 588, 1057-72	3.9	32
403	Simulated prosthetic visual fixation, saccade, and smooth pursuit. <i>Vision Research</i> , <b>2005</b> , 45, 775-88	2.1	32
402	Computationally Efficient Adaptive Error-State Kalman Filter for Attitude Estimation. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 9332-9342	4	31
401	Automatic detection of left ventricular ejection time from a finger photoplethysmographic pulse oximetry waveform: comparison with Doppler aortic measurement. <i>Physiological Measurement</i> , <b>2007</b> , 28, 439-52	2.9	31
400	Vagal control of sinoatrial rhythm: a mathematical model. <i>Journal of Theoretical Biology</i> , <b>1996</b> , 182, 21-44.3		31
399	Multi-Site Photoplethysmography Technology for Blood Pressure Assessment: Challenges and Recommendations. <i>Journal of Clinical Medicine</i> , <b>2019</b> , 8,	5.1	30
398	A simplified 3D model of whole heart electrical activity and 12-lead ECG generation. <i>Computational and Mathematical Methods in Medicine</i> , <b>2013</b> , 2013, 134208	2.8	30

397	Spectral analysis of accelerometry signals from a directed-routine for falls-risk estimation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2011</b> , 58,	5	30
396	Current and Future Challenges in Point-of-Care Technologies: A Paradigm-Shift in Affordable Global Healthcare With Personalized and Preventive Medicine. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , <b>2015</b> , 3, 2800110	3	29
395	ECG quality measures in telecare monitoring. <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, 2869-72	0.9	29
394	Spatially restricted electrical activation of retinal ganglion cells in the rabbit retina by hexapolar electrode return configuration. <i>Journal of Neural Engineering</i> , <b>2013</b> , 10, 036013	5	28
393	Non-invasive estimation of pulsatile flow and differential pressure in an implantable rotary blood pump for heart failure patients. <i>Physiological Measurement</i> , <b>2009</b> , 30, 371-86	2.9	28
392	Information technology in primary health care. <i>International Journal of Medical Informatics</i> , <b>1999</b> , 55, 9-22	5.3	28
391	A living electrode construct for incorporation of cells into bionic devices. <i>MRS Communications</i> , <b>2017</b> , 7, 487-495	2.7	27
390	Can triaxial accelerometry accurately recognize inclined walking terrains?. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 2506-16	5	27
389	Cytotoxicity of implantable microelectrode arrays produced by laser micromachining. <i>Biomaterials</i> , <b>2010</b> , 31, 886-93	15.6	27
388	A quantitative analysis of head movement behaviour during visual acuity assessment under prosthetic vision simulation. <i>Journal of Neural Engineering</i> , <b>2007</b> , 4, S108-23	5	27
387	High-amplitude electrical stimulation can reduce elicited neuronal activity in visual prosthesis. <i>Scientific Reports</i> , <b>2017</b> , 7, 42682	4.9	26
386	Falls management: detection and prevention, using a waist-mounted triaxial accelerometer. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 4037-40		26
385	An adapted Gaussian mixture model approach to accelerometry-based movement classification using time-domain features. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 3600-3		26
384	Determining activity using a triaxial accelerometer		26
383	Research and clinical assessment of eating and exercise behaviour. <i>British Journal of Hospital Medicine</i> , <b>1999</b> , 60, 481-5		26
382	Numerical investigation of the effect of cannula placement on thrombosis. <i>Theoretical Biology and Medical Modelling</i> , <b>2013</b> , 10, 35	2.3	25
381	Predicting days in hospital using health insurance claims. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2015</b> , 19, 1224-1233	7.2	25
380	A sliding mode-based starling-like controller for implantable rotary blood pumps. <i>Artificial Organs</i> , <b>2014</b> , 38, 587-93	2.6	25

379	Frequency spectrum analysis of finger photoplethysmographic waveform variability during haemodialysis. <i>Physiological Measurement</i> , <b>2010</b> , 31, 1203-16	2.9	25
378	Estimation of pressure pulse amplification between aorta and brachial artery using stepwise multiple regression models. <i>Physiological Measurement</i> , <b>2004</b> , 25, 879-89	2.9	25
377	A gradient model of cardiac pacemaker myocytes. <i>Progress in Biophysics and Molecular Biology</i> , <b>2004</b> , 85, 301-23	4.7	25
376	A small-scale randomised controlled trial of home telemonitoring in patients with severe chronic obstructive pulmonary disease. <i>Journal of Telemedicine and Telecare</i> , <b>2017</b> , 23, 650-656	6.8	24
375	Development of nanoparticle film-based multi-axial tactile sensors for biomedical applications. <i>Sensors and Actuators A: Physical</i> , <b>2013</b> , 196, 38-47	3.9	24
374	A wearable triaxial accelerometry system for longitudinal assessment of falls risk. <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, 2840-3	0.9	24
373	The Effect of Electric Cross-Talk in Retinal Neurostimulation <b>2016</b> , 57, 1031-7		24
372	Healthcare Engineering Defined: A White Paper. <i>Journal of Healthcare Engineering</i> , <b>2015</b> , 6, 635-47	3.7	23
371	Simulated unobtrusive falls detection with multiple persons. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 3185-96	5	23
370	A cardiovascular mathematical model of graded head-up tilt. <i>PLoS ONE</i> , <b>2013</b> , 8, e77357	3.7	23
369	Falls event detection using triaxial accelerometry and barometric pressure measurement. <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>2009</b> , 2009, 6111-4	0.9	23
368	Noninvasive average flow and differential pressure estimation for an implantable rotary blood pump using dimensional analysis. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2008</b> , 55, 2094-101	5	23
367	Vision function testing for a suprachoroidal retinal prosthesis: effects of image filtering. <i>Journal of Neural Engineering</i> , <b>2016</b> , 13, 036013	5	23
366	Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2020</b> , 24, 160-170	7.2	23
365	Advanced Intelligent Systems for Surgical Robotics. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 1900138	6	22
364	Polymer micro-fiber Bragg grating. <i>Optics Letters</i> , <b>2013</b> , 38, 3359-62	3	22
363	Peripheral photoplethysmography variability analysis of sepsis patients. <i>Medical and Biological Engineering and Computing</i> , <b>2011</b> , 49, 337-47	3.1	22
362	Noninvasive activity-based control of an implantable rotary blood pump: comparative software simulation study. <i>Artificial Organs</i> , <b>2010</b> , 34, E34-45	2.6	22

361	Development and surgical implantation of a vision prosthesis model into the ovine eye. <i>Clinical and Experimental Ophthalmology</i> , <b>2002</b> , 30, 36-40	2.4	22
360	Conductive Hydrogel Electrodes for Delivery of Long-Term High Frequency Pulses. <i>Frontiers in Neuroscience</i> , <b>2017</b> , 11, 748	5.1	21
359	Integrated electrode and high density feedthrough system for chip-scale implantable devices. <i>Biomaterials</i> , <b>2013</b> , 34, 6109-18	15.6	21
358	Quasi-monopolar electrical stimulation of the retina: a computational modelling study. <i>Journal of Neural Engineering</i> , <b>2014</b> , 11, 025002	5	21
357	Fabrication of multi-layer, high-density micro-electrode arrays for neural stimulation and bio-signal recording <b>2007</b> ,		21
356	New Methods to Monitor Stair Ascents Using a Wearable Pendant Device Reveal How Behavior, Fear, and Frailty Influence Falls in Octogenarians. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2015</b> , 62, 2595-601	5	20
355	Numerical optimization studies of cardiovascular-rotary blood pump interaction. <i>Artificial Organs</i> , <b>2012</b> , 36, E110-24	2.6	20
354	Spontaneous fluctuations in the peripheral photoplethysmographic waveform: roles of arterial pressure and muscle sympathetic nerve activity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2012</b> , 302, H826-36	5.2	20
353	Living electrodes: tissue engineering the neural interface. <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>2013</b> , 2013, 6957-60	0.9	20
352	Assessment of right pump outflow banding and speed changes on pulmonary hemodynamics during biventricular support with two rotary left ventricular assist devices. <i>Artificial Organs</i> , <b>2011</b> , 35, 807-13	2.6	20
351	Gait patterns classification using spectral features <b>2008</b> ,		20
350	Modification of DiFrancesco-Noble equations to simulate the effects of vagal stimulation on in vivo mammalian sinoatrial node electrical activity. <i>Annals of Biomedical Engineering</i> , <b>1993</b> , 21, 321-35	4.7	20
349	Unintended Consequences of Wearable Sensor Use in Healthcare. Contribution of the IMIA Wearable Sensors in Healthcare WG. <i>Yearbook of Medical Informatics</i> , <b>2016</b> , 25, 73-86	4	20
348	Progress in artificial vision through suprachoroidal retinal implants. <i>Journal of Neural Engineering</i> , <b>2017</b> , 14, 045002	5	19
347	Bio-Inspired Conformable and Helical Soft Fabric Gripper with Variable Stiffness and Touch Sensing. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 2000724	6.8	19
346	Performance optimization of current focusing and virtual electrode strategies in retinal implants. <i>Computer Methods and Programs in Biomedicine</i> , <b>2014</b> , 117, 334-42	6.9	19
345	Preload-based starling-like control for rotary blood pumps: numerical comparison with pulsatility control and constant speed operation. <i>PLoS ONE</i> , <b>2015</b> , 10, e0121413	3.7	19
344	Frequency analysis of photoplethysmogram and its derivatives. <i>Computer Methods and Programs in Biomedicine</i> , <b>2015</b> , 122, 503-12	6.9	19

343	Comparison of preload-sensitive pressure and flow controller strategies for a dual device biventricular support system. <i>Artificial Organs</i> , <b>2012</b> , 36, 256-65	2.6	19
342	Electrical stimulation of inner retinal neurons in wild-type and retinally degenerate (rd/rd) mice. <i>PLoS ONE</i> , <b>2013</b> , 8, e68882	3.7	19
341	Fingertip photoplethysmographic waveform variability and systemic vascular resistance in intensive care unit patients. <i>Medical and Biological Engineering and Computing</i> , <b>2011</b> , 49, 859-66	3.1	19
340	Frequency-dependent reduction of voltage-gated sodium current modulates retinal ganglion cell response rate to electrical stimulation. <i>Journal of Neural Engineering</i> , <b>2011</b> , 8, 066007	5	19
339	Learning prosthetic vision: a virtual-reality study. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2005</b> , 13, 249-55	4.8	19
338	Selecting Power-Efficient Signal Features for a Low-Power Fall Detector. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 2729-2736	5	18
337	Closed-Loop Efficient Searching of Optimal Electrical Stimulation Parameters for Preferential Excitation of Retinal Ganglion Cells. <i>Frontiers in Neuroscience</i> , <b>2018</b> , 12, 168	5.1	18
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335	Web versus app: compliance of patients in a telehealth diabetes management programme using two different technologies. <i>Journal of Telemedicine and Telecare</i> , <b>2012</b> , 18, 476-80	6.8	18
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98	Identifying physiologically significant pumping state transitions in implantable rotary blood pumps used as left ventricular assist devices: an in-vivo study		2
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52	The effect of heartbeat-synchronised running on the cardiovascular system		1
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