

Nigel H Lovell

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7964720/nigel-h-lovell-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

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	A Smartphone-Based Model of Care to Support Patients With Cardiac Disease Transitioning From Hospital to the Community (TeleClinical Care): Pilot Randomized Controlled Trial.. <i>JMIR MHealth and UHealth</i> , 2022 , 10, e32554	5.5	1
485	Visual Stimulation Systems 2022 , 517-539		
484	The low abundance of CpG in the SARS-CoV-2 genome is not an evolutionarily signature of ZAP.. <i>Scientific Reports</i> , 2022 , 12, 2420	4.9	0
483	Integrative analysis of mutated genes and mutational processes reveals novel mutational biomarkers in colorectal cancer.. <i>BMC Bioinformatics</i> , 2022 , 23, 138	3.6	1
482	A varying-radius cable equation for the modelling of impulse propagation in excitable fibres.. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2022 , e3616	2.6	
481	Retinal/Visual Interfaces (Models, Theory, Techniques): Overview 2022 , 97-100		
480	Process Evaluation of a Randomised Controlled Trial for TeleClinical Care, a Smartphone-App Based Model of Care.. <i>Frontiers in Medicine</i> , 2021 , 8, 780882	4.9	
479	Smart surgical sutures using soft artificial muscles. <i>Scientific Reports</i> , 2021 , 11, 22420	4.9	0
478	Safety and biocompatibility of a bionic eye: Imaging, intraocular pressure, and histology data.. <i>Data in Brief</i> , 2021 , 39, 107634	1.2	
477	Twisting and Braiding Fluid-Driven Soft Artificial Muscle Fibers for Robotic Applications. <i>Soft Robotics</i> , 2021 ,	9.2	6
476	Implantation and long-term assessment of the stability and biocompatibility of a novel 98 channel suprachoroidal visual prosthesis in sheep. <i>Biomaterials</i> , 2021 , 279, 121191	15.6	2
475	Insights from Computational Modelling: Selective Stimulation of Retinal Ganglion Cells 2021 , 233-247		1
474	Trials and Tribulations: mHealth Clinical Trials in the COVID-19 Pandemic. <i>Yearbook of Medical Informatics</i> , 2021 , 30, 272-279	4	1
473	Recommendation to Use Wearable-Based mHealth in Closed-Loop Management of Acute Cardiovascular Disease Patients During the COVID-19 Pandemic. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021 , 25, 903-908	7.2	6
472	Soft robotic fabric gripper with gecko adhesion and variable stiffness. <i>Sensors and Actuators A: Physical</i> , 2021 , 323, 112673	3.9	9
471	Multi-Parametric Fusion of 3D Power Doppler Ultrasound for Fetal Kidney Segmentation Using Fully Convolutional Neural Networks. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021 , 25, 2050-2057	7.2	2
470	Dynamic facial reanimation using active implantable prosthesis: Restoring blink. <i>Journal of Plastic, Reconstructive and Aesthetic Surgery</i> , 2021 , 74, 1633-1701	1.7	0

469	Quantitative neurogenetics: applications in understanding disease. <i>Biochemical Society Transactions</i> , 2021 , 49, 1621-1631	5.1	1
468	Wearable Sensing and Telehealth Technology with Potential Applications in the Coronavirus Pandemic. <i>IEEE Reviews in Biomedical Engineering</i> , 2021 , 14, 48-70	6.4	86
467	A Novel Automated Blood Pressure Estimation Algorithm Using Sequences of Korotkoff Sounds. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021 , 25, 1257-1264	7.2	5
466	Estimating Lower Limb Kinematics Using a Reduced Wearable Sensor Count. <i>IEEE Transactions on Biomedical Engineering</i> , 2021 , 68, 1293-1304	5	10
465	Multiphysics computational modelling of the cardiac ventricles. <i>IEEE Reviews in Biomedical Engineering</i> , 2021 , PP,	6.4	1
464	Visual Prostheses: Neuroengineering Handbook 2021 , 1-46		0
463	Telemedicine systems to manage chronic disease 2021 , 177-195		
462	Spatial-Spectral Density Peaks-Based Discriminant Analysis for Membranous Nephropathy Classification Using Microscopic Hyperspectral Images. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021 , 25, 3041-3051	7.2	1
461	Estimating Lower Body Kinematics Using a Lie Group Constrained Extended Kalman Filter and Reduced IMU Count. <i>IEEE Sensors Journal</i> , 2021 , 21, 20969-20979	4	0
460	Corrections to Design, Fabrication, and Hysteresis Modeling of Soft Microtubule Artificial Muscle (SMAM) for Medical Applications. <i>IEEE Robotics and Automation Letters</i> , 2021 , 6, 8409-8409	4.2	1
459	A Sensorless Control System for an Implantable Heart Pump Using a Real-Time Deep Convolutional Neural Network. <i>IEEE Transactions on Biomedical Engineering</i> , 2021 , 68, 3029-3038	5	3
458	Design, Fabrication, and Hysteresis Modeling of Soft Microtubule Artificial Muscle (SMAM) for Medical Applications. <i>IEEE Robotics and Automation Letters</i> , 2021 , 1-1	4.2	4
457	An Unobtrusive Fall Detection System Using Low Resolution Thermal Sensors and Convolutional Neural Networks. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2021 , 2021, 6949-6952	0.9	0
456	Deep Learning for Activity Recognition in Older People Using a Pocket-Worn Smartphone. <i>Sensors</i> , 2020 , 20,	3.8	11
455	Estimating Lower Limb Kinematics using a Lie Group Constrained EKF and a Reduced Wearable IMU Count 2020 ,		1
454	Bio-Inspired Conformable and Helical Soft Fabric Gripper with Variable Stiffness and Touch Sensing. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000724	6.8	19
453	Homecare Robotic Systems for Healthcare 4.0: Visions and Enabling Technologies. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020 , 24, 2535-2549	7.2	45
452	Robust PPG motion artifact detection using a 1-D convolution neural network. <i>Computer Methods and Programs in Biomedicine</i> , 2020 , 196, 105596	6.9	15

451	Neural activity of functionally different retinal ganglion cells can be robustly modulated by high-rate electrical pulse trains. <i>Journal of Neural Engineering</i> , 2020 , 17, 045013	5	5
450	Advanced Intelligent Systems for Surgical Robotics. <i>Advanced Intelligent Systems</i> , 2020 , 2, 1900138	6	22
449	Cuffless Single-Site Photoplethysmography for Blood Pressure Monitoring. <i>Journal of Clinical Medicine</i> , 2020 , 9,	5.1	36
448	Advances in Sweat Wearables: Sample Extraction, Real-Time Biosensing, and Flexible Platforms. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 34337-34361	9.5	34
447	Recreation of eyelid mechanics using the sling concept. <i>Journal of Plastic, Reconstructive and Aesthetic Surgery</i> , 2020 , 73, 942-950	1.7	2
446	Multimodal Capacitive and Piezoresistive Sensor for Simultaneous Measurement of Multiple Forces. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 22179-22190	9.5	32
445	Artificial Intelligence Based Blood Pressure Estimation From Auscultatory and Oscillometric Waveforms: A Methodological Review. <i>IEEE Reviews in Biomedical Engineering</i> , 2020 , PP,	6.4	5
444	Mobile Phone Technologies in the Management of Ischemic Heart Disease, Heart Failure, and Hypertension: Systematic Review and Meta-Analysis. <i>JMIR MHealth and UHealth</i> , 2020 , 8, e16695	5.5	18
443	Assessment of Hypertension Using Clinical Electrocardiogram Features: A First-Ever Review. <i>Frontiers in Medicine</i> , 2020 , 7, 583331	4.9	4
442	HFAM: Soft Hydraulic Filament Artificial Muscles for Flexible Robotic Applications. <i>IEEE Access</i> , 2020 , 8, 226637-226652	3.5	5
441	A centralized multi-objective model predictive control for a biventricular assist device: An in vitro evaluation. <i>Biomedical Signal Processing and Control</i> , 2020 , 59, 101914	4.9	1
440	Creation of virtual channels in the retina using synchronous and asynchronous stimulation - a modelling study. <i>Journal of Neural Engineering</i> , 2020 ,	5	2
439	Investigation of the inherent left-right flow balancing of rotary total artificial hearts by means of a resistance box. <i>Artificial Organs</i> , 2020 , 44, 584-593	2.6	1
438	Smart Triggering of the Barometer in a Fall Detector Using a Semi-Permeable Membrane. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 146-157	5	3
437	Predicting the outcome of transcatheter mitral valve implantation using image-based computational models. <i>Journal of Cardiovascular Computed Tomography</i> , 2020 , 14, 335-342	2.8	9
436	A Three-Dimensional Microelectrode Array to Generate Virtual Electrodes for Epiretinal Prosthesis Based on a Modeling Study. <i>International Journal of Neural Systems</i> , 2020 , 30, 2050006	6.2	7
435	Can mHealth Technology Help Mitigate the Effects of the COVID-19 Pandemic?. <i>IEEE Open Journal of Engineering in Medicine and Biology</i> , 2020 , 1, 243-248	5.9	33
434	Soft Microtubule Muscle-Driven 3-Axis Skin-Stretch Haptic Devices. <i>IEEE Access</i> , 2020 , 8, 157878-157891	3.5	10

433	Estimating Lower Limb Kinematics using Distance Measurements with a Reduced Wearable Inertial Sensor Count. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2020, 4858-4862</i>	0.9	2
432	Estimating Lower Limb Kinematics Using a Lie Group Constrained Extended Kalman Filter with a Reduced Wearable IMU Count and Distance Measurements. <i>Sensors, 2020, 20,</i>	3.8	1
431	Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN. <i>IEEE Journal of Biomedical and Health Informatics, 2020, 24, 160-170</i>	7.2	23
430	A Physiological Control System for an Implantable Heart Pump That Accommodates for Interpatient and Inpatient Variations. <i>IEEE Transactions on Biomedical Engineering, 2020, 67, 1167-1175</i>	5	11
429	Multimodal Photoplethysmography-Based Approaches for Improved Detection of Hypertension. <i>Journal of Clinical Medicine, 2020, 9,</i>	5.1	10
428	Computational Simulation Expands Understanding of Electrotransfer-Based Gene Augmentation for Enhancement of Neural Interfaces. <i>Frontiers in Neuroscience, 2019, 13, 691</i>	5.1	1
427	Conductive elastomer composites for fully polymeric, flexible bioelectronics. <i>Biomaterials Science, 2019, 7, 1372-1385</i>	7.4	39
426	Neurotrophin gene augmentation by electrotransfer to improve cochlear implant hearing outcomes. <i>Hearing Research, 2019, 380, 137-149</i>	3.9	11
425	Foveal eccentricity can influence activation threshold in subretinal electrical stimulation. <i>Biomedical Physics and Engineering Express, 2019, 5, 035009</i>	1.5	1
424	A Neuroethics Framework for the Australian Brain Initiative. <i>Neuron, 2019, 101, 365-369</i>	13.9	5
423	Mediating Retinal Ganglion Cell Spike Rates Using High-Frequency Electrical Stimulation. <i>Frontiers in Neuroscience, 2019, 13, 413</i>	5.1	13
422	The use of photoplethysmography for assessing hypertension. <i>Npj Digital Medicine, 2019, 2, 60</i>	15.7	147
421	Learning the Orientation of a Loosely-Fixed Wearable IMU Relative to the Body Improves the Recognition Rate of Human Postures and Activities. <i>Sensors, 2019, 19,</i>	3.8	4
420	Multi-Site Photoplethysmography Technology for Blood Pressure Assessment: Challenges and Recommendations. <i>Journal of Clinical Medicine, 2019, 8,</i>	5.1	30
419	Optimizing Stimulation Strategies for Retinal Electrical Stimulation: a Modelling Study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2019, 2019, 2872-2875</i>	0.9	
418	Dual-Plasmid Bionic Array-Directed Gene Electrotransfer in HEK293 Cells and Cochlear Mesenchymal Cells Probes Transgene Expression and Cell Fate. <i>Human Gene Therapy, 2019, 30, 211-224</i>	4.8	6
417	A centralized multi-objective model predictive control for a biventricular assist device: An in silico evaluation. <i>Biomedical Signal Processing and Control, 2019, 49, 137-148</i>	4.9	6
416	Current Advances in the Design of Retinal and Cortical Visual Prostheses 2019, 355-403		

415	A biopotential optrode array: operation principles and simulations. <i>Scientific Reports</i> , 2018 , 8, 2690	4.9	9
414	Evaluation of an mHealth-Based Adjunct to Outpatient Cardiac Rehabilitation. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018 , 22, 1938-1948	7.2	14
413	Comparing perilymph proteomes across species. <i>Laryngoscope</i> , 2018 , 128, E47-E52	3.6	8
412	Closed-Loop Efficient Searching of Optimal Electrical Stimulation Parameters for Preferential Excitation of Retinal Ganglion Cells. <i>Frontiers in Neuroscience</i> , 2018 , 12, 168	5.1	18
411	From A to Z: Wearable technology explained. <i>Maturitas</i> , 2018 , 113, 40-47	5	66
410	Differential electrical responses in retinal ganglion cell subtypes: effects of synaptic blockade and stimulating electrode location. <i>Journal of Neural Engineering</i> , 2018 , 15, 046020	5	9
409	Computationally Efficient Adaptive Error-State Kalman Filter for Attitude Estimation. <i>IEEE Sensors Journal</i> , 2018 , 18, 9332-9342	4	31
408	Long-term anesthetic protocol in rats: feasibility in electrophysiology studies in visual prosthesis. <i>Veterinary Ophthalmology</i> , 2018 , 21, 290-297	1.4	3
407	Application of multiobjective neural predictive control to biventricular assistance using dual rotary blood pumps. <i>Biomedical Signal Processing and Control</i> , 2018 , 39, 81-93	4.9	7
406	A Multi-Domain Continuum Model of Electrical Stimulation of Healthy and Degenerate Retina. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2018 , 2018, 6117-6120	0.9	1
405	Stimulation of peripheral nerves using conductive hydrogel electrodes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2018 , 2018, 5475-5478	0.9	2
404	Detection of Atrial Fibrillation from RR Intervals and PQRST Morphology using a Neural Network Ensemble. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2018 , 2018, 5998-6001	0.9	4
403	A Multiphysics Biventricular Cardiac Model: Simulations With a Left-Ventricular Assist Device. <i>Frontiers in Physiology</i> , 2018 , 9, 1259	4.6	9
402	Adaptive template matching of photoplethysmogram pulses to detect motion artefact. <i>Physiological Measurement</i> , 2018 , 39, 105005	2.9	12
401	A Low-Power Fall Detector Balancing Sensitivity and False Alarm Rate. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018 , 22, 1929-1937	7.2	15
400	The role of infarct transmural extent in infarct extension: A computational study. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017 , 33, e02794	2.6	11
399	Selecting Power-Efficient Signal Features for a Low-Power Fall Detector. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2729-2736	5	18
398	High-amplitude electrical stimulation can reduce elicited neuronal activity in visual prosthesis. <i>Scientific Reports</i> , 2017 , 7, 42682	4.9	26

397	Differential effect of brief electrical stimulation on voltage-gated potassium channels. <i>Journal of Neurophysiology</i> , 2017 , 117, 2014-2024	3.2	8
396	Progress in artificial vision through suprachoroidal retinal implants. <i>Journal of Neural Engineering</i> , 2017 , 14, 045002	5	19
395	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> , 2017 , 21, 1479-1486	7.2	34
394	Preload-based Starling-like control of rotary blood pumps: An in-vitro evaluation. <i>PLoS ONE</i> , 2017 , 12, e0172393	3.7	7
393	Mimicking natural neural encoding through retinal electrostimulation 2017 ,		5
392	Conductive Hydrogel Electrodes for Delivery of Long-Term High Frequency Pulses. <i>Frontiers in Neuroscience</i> , 2017 , 11, 748	5.1	21
391	Multipolar Field Shaping in a Suprachoroidal Visual Prosthesis. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017 , 25, 2480-2487	4.8	4
390	Survey of electrically evoked responses in the retina - stimulus preferences and oscillation among neurons. <i>Scientific Reports</i> , 2017 , 7, 13802	4.9	8
389	A living electrode construct for incorporation of cells into bionic devices. <i>MRS Communications</i> , 2017 , 7, 487-495	2.7	27
388	A spectral element method with adaptive segmentation for accurately simulating extracellular electrical stimulation of neurons. <i>Medical and Biological Engineering and Computing</i> , 2017 , 55, 823-831	3.1	3
387	A small-scale randomised controlled trial of home telemonitoring in patients with severe chronic obstructive pulmonary disease. <i>Journal of Telemedicine and Telecare</i> , 2017 , 23, 650-656	6.8	24
386	Image-based fluid dynamics analysis of left ventricle outflow tract pressure gradient after deployment transcatheter mitral valve. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 1166-1169	0.9	2
385	Retinal electrostimulation in rats: Activation thresholds from superior colliculus and visual cortex recordings. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 1166-1169	0.9	3
384	A continuum model of electrical stimulation of multi-compartmental retinal ganglion cells. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 2716-2719	0.9	5
383	A generic cardiac biventricular fluid-electromechanics model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 3680-3683	0.9	5
382	Suprachoroidal Retinal Prostheses 2017 , 125-138		3
381	Cochlear Implant Close-Field Electroporation 2017 , 1679-1697		
380	Low-Power Fall Detector Using Triaxial Accelerometry and Barometric Pressure Sensing. <i>IEEE Transactions on Industrial Informatics</i> , 2016 , 12, 2302-2311	11.9	41

379	Low-power operation of a barometric pressure sensor for use in an automatic fall detector. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 2010-2013	0.9	5
378	A simplified state-space model of biventricular assist device-cardiovascular system interaction. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 4317-4320	0.9	2
377	Restoration of eye closure in facial paralysis using implantable electromagnetic actuator. <i>Journal of Plastic, Reconstructive and Aesthetic Surgery</i> , 2016 , 69, 1521-1525	1.7	4
376	Cortical responses following simultaneous and sequential retinal neurostimulation with different return configurations. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 4317-4320	0.9	8
375	Modeling the Debye dielectric response in the time domain for a liquid crystal-based biopotential optrode. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 4857-4860	0.9	2
374	Computational modeling of a novel liquid crystal-based optrode 2016 ,		1
373	Local Heterogeneous Electrical Restitution Properties of Rabbit Atria. <i>Journal of Cardiovascular Electrophysiology</i> , 2016 , 27, 743-53	2.7	3
372	Mapping of bionic array electric field focusing in plasmid DNA-based gene electrotransfer. <i>Gene Therapy</i> , 2016 , 23, 369-79	4	8
371	Analyzing health insurance claims on different timescales to predict days in hospital. <i>Journal of Biomedical Informatics</i> , 2016 , 60, 187-96	10.2	17
370	Assistive peripheral phosphene arrays deliver advantages in obstacle avoidance in simulated end-stage retinitis pigmentosa: a virtual-reality study. <i>Journal of Neural Engineering</i> , 2016 , 13, 026022	5	5
369	Electrical activity of ON and OFF retinal ganglion cells: a modelling study. <i>Journal of Neural Engineering</i> , 2016 , 13, 025005	5	14
368	Numerical Simulation of a Biventricular Assist Device with Fixed Right Outflow Cannula Banding During Pulmonary Hypertension. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 1008-18	4.7	7
367	Classification of Implantable Rotary Blood Pump States With Class Noise. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2016 , 20, 829-837	7.2	
366	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> , 2016 , 54, 663-74	3.1	84
365	A Six-Step Framework on Biomedical Signal Analysis for Tackling Noncommunicable Diseases: Current and Future Perspectives. <i>JMIR Biomedical Engineering</i> , 2016 , 1, e1	1.3	15
364	Cochlear Implant Close-Field Electroporation 2016 , 1-20		3
363	Health-Enabling and Ambient Assistive Technologies: Past, Present, Future. <i>Yearbook of Medical Informatics</i> , 2016 , Suppl 1, S76-91	4	17
362	Bio-Inspired PVDF-Based, Mouse Whisker Mimicking, Tactile Sensor. <i>Applied Sciences (Switzerland)</i> , 2016 , 6, 297	2.6	10

361	Unintended Consequences of Wearable Sensor Use in Healthcare. Contribution of the IMIA Wearable Sensors in Healthcare WG. <i>Yearbook of Medical Informatics</i> , 2016 , 25, 73-86	4	20
360	The Effect of Electric Cross-Talk in Retinal Neurostimulation 2016 , 57, 1031-7		24
359	Discussion of "The New Role of Biomedical Informatics in the Age of Digital Medicine". <i>Methods of Information in Medicine</i> , 2016 , 55, 403-421	1.5	2
358	Quaternion-Based Complementary Filter for Attitude Determination of a Smartphone. <i>IEEE Sensors Journal</i> , 2016 , 16, 6008-6017	4	52
357	Understanding the cochlear implant environment by mapping perilymph proteomes from different species. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 5237-5240	0.9	0
356	Simulation of motor current waveforms in monitoring aortic valve state during ventricular assist device support. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 1451-1454	0.9	
355	QRS Detection Algorithm for Telehealth Electrocardiogram Recordings. <i>IEEE Transactions on Biomedical Engineering</i> , 2016 , 63, 1377-88	5	52
354	Vision function testing for a suprachoroidal retinal prosthesis: effects of image filtering. <i>Journal of Neural Engineering</i> , 2016 , 13, 036013	5	23
353	Activation and inhibition of retinal ganglion cells in response to epiretinal electrical stimulation: a computational modelling study. <i>Journal of Neural Engineering</i> , 2015 , 12, 016002	5	14
352	Low-power technologies for wearable telecare and telehealth systems: A review. <i>Biomedical Engineering Letters</i> , 2015 , 5, 1-9	3.6	36
351	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> , 2015 , 3, 2800110	3	29
350	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> , 2015 , 62, 2595-601	5	20
349	Calcium imaging of retinal ganglion cell dendritic responses to extracellular microelectrode stimulation 2015 ,		1
348	Generating 3D anatomically detailed models of the retina from OCT data sets: implications for computational modelling. <i>Journal of Modern Optics</i> , 2015 , 62, 1789-1800	1.1	1
347	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> , 2015 , 2, 79-88	1.9	35
346	Signal quality measures on pulse oximetry and blood pressure signals acquired from self-measurement in a home environment. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015 , 19, 102-8	7.2	13
345	Monitoring for Elderly Care: The Role of Wearable Sensors in Fall Detection and Fall Prediction Research 2015 , 619-652		2
344	Optimizing retinal ganglion cell responses to high-frequency electrical stimulation strategies for preferential neuronal excitation 2015 ,		5

343	Anatomy and Physiology of Left Ventricular Suction Induced by Rotary Blood Pumps. <i>Artificial Organs</i> , 2015 , 39, 681-90	2.6	13
342	Towards an assistive peripheral visual prosthesis for long-term treatment of retinitis pigmentosa: evaluating mobility performance in immersive simulations. <i>Journal of Neural Engineering</i> , 2015 , 12, 036001	3.5	9
341	Healthcare Engineering Defined: A White Paper. <i>Journal of Healthcare Engineering</i> , 2015 , 6, 635-47	3.7	23
340	On Time Domain Analysis of Photoplethysmogram Signals for Monitoring Heat Stress. <i>Sensors</i> , 2015 , 15, 24716-34	3.8	11
339	Towards Investigating Global Warming Impact on Human Health Using Derivatives of Photoplethysmogram Signals. <i>International Journal of Environmental Research and Public Health</i> , 2015 , 12, 12776-91	4.6	6
338	Improved Measurement of Blood Pressure by Extraction of Characteristic Features from the Cuff Oscillometric Waveform. <i>Sensors</i> , 2015 , 15, 14142-61	3.8	14
337	Tracking the Evolution of Smartphone Sensing for Monitoring Human Movement. <i>Sensors</i> , 2015 , 15, 1890-833	3.33	120
336	Preload-based starling-like control for rotary blood pumps: numerical comparison with pulsatility control and constant speed operation. <i>PLoS ONE</i> , 2015 , 10, e0121413	3.7	19
335	Beyond Subjective Self-Rating: EEG Signal Classification of Cognitive Workload. <i>IEEE Transactions on Autonomous Mental Development</i> , 2015 , 7, 301-310		53
334	Actuator design for robotic powered an ankle-foot prosthesis 2015 ,		1
333	An all-organic active pixel photosensor featuring ion-gel transistors 2015 , 3, 8-13		3
332	Impact of hierarchies of clinical codes on predicting future days in hospital. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 6852-5	0.9	1
331	Electromechanics modeling of the effects of myocardial infarction on left ventricular function. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 5684-7	0.9	4
330	Assistive peripheral prosthetic vision aids perception and mobility in outdoor environments: A virtual-reality simulation study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 1400-4	0.9	2
329	Producing 3D neuronal networks in hydrogels for living bionic device interfaces. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 2600-3	0.9	9
328	Frequency analysis of photoplethysmogram and its derivatives. <i>Computer Methods and Programs in Biomedicine</i> , 2015 , 122, 503-12	6.9	19
327	A model of electrical stimulation of a retinal cell population using a multi-electrode array. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 2287-90	0.9	
326	Electrically evoked potentials in an ovine model for the evaluation of visual prosthesis efficacy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 3359-62	0.9	4

325	Simulation of aortic valve dynamics during ventricular support. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 1881-5	0.9	
324	Freestanding, soft bioelectronics 2015 ,		2
323	Effect of Home Telehealth Data Quality on Decision Support System Performance. <i>Procedia Computer Science</i> , 2015 , 64, 352-359	1.6	6
322	Predicting days in hospital using health insurance claims. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015 , 19, 1224-1233	7.2	25
321	Bottom-up subspace clustering suggests a paradigm shift to prevent fall injuries. <i>Medical Hypotheses</i> , 2015 , 84, 356-62	3.8	11
320	Predicting the risk of exacerbation in patients with chronic obstructive pulmonary disease using home telehealth measurement data. <i>Artificial Intelligence in Medicine</i> , 2015 , 63, 51-9	7.4	52
319	Hemodynamic response to exercise and head-up tilt of patients implanted with a rotary blood pump: a computational modeling study. <i>Artificial Organs</i> , 2015 , 39, E24-35	2.6	16
318	Visual Stimulation Systems 2015 , 1-23		
317	A low-power fall detection algorithm based on triaxial acceleration and barometric pressure. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 570-3	0.9	2
316	Robust aortic valve non-opening detection for different cardiac conditions. <i>Artificial Organs</i> , 2014 , 38, E57-67	2.6	11
315	A cortical integrate-and-fire neural network model for blind decoding of visual prosthetic stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 1715-8	0.9	
314	A comparison of activity classification in younger and older cohorts using a smartphone. <i>Physiological Measurement</i> , 2014 , 35, 2269-86	2.9	51
313	Performance optimization of current focusing and virtual electrode strategies in retinal implants. <i>Computer Methods and Programs in Biomedicine</i> , 2014 , 117, 334-42	6.9	19
312	Understanding the retina: a review of computational models of the retina from the single cell to the network level. <i>Critical Reviews in Biomedical Engineering</i> , 2014 , 42, 419-36	1.1	13
311	Inertial measurements of free-living activities: assessing mobility to predict falls. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 6892-5	0.9	6
310	Pilot evaluation of an unobtrusive system to detect falls at nighttime. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 1756-9	0.9	3
309	Towards photorealistic and immersive virtual-reality environments for simulated prosthetic vision: integrating recent breakthroughs in consumer hardware and software. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 2507-600	0.9	2
308	Simulation of motor current waveform as an index for aortic valve open-close condition during ventricular support. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 2013-6	0.9	1

307	Neuromodulation of the retina from the suprachoroidal space: The Phoenix 99 implant 2014 ,		9
306	Gait as a biomarker? Accelerometers reveal that reduced movement quality while walking is associated with Parkinson's disease, ageing and fall risk. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 5968-71</i>	0.9	9
305	Starling-like flow control of a left ventricular assist device: in vitro validation. <i>Artificial Organs, 2014, 38, E46-56</i>	2.6	38
304	Validation of an accelerometer-based fall prediction model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 4531-4</i>	0.9	6
303	Pt-Al ₂ O ₃ interfaces in cofired ceramics for use in miniaturized neuroprosthetic implants. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 500-7</i>	3.5	17
302	A sliding mode-based starling-like controller for implantable rotary blood pumps. <i>Artificial Organs, 2014, 38, 587-93</i>	2.6	25
301	Predicting number of hospitalization days based on health insurance claims data using bagged regression trees. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 2705-8</i>	0.9	
300	Selective activation of ON and OFF retinal ganglion cells to high-frequency electrical stimulation: a computational modeling study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 6108-11</i>	0.9	7
299	Study protocol for the PHANTOM study: prehospital assessment of noninvasive tissue oximetry monitoring. <i>Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine, 2014, 22, 57</i>	3.6	3
298	Quasi-monopolar electrical stimulation of the retina: a computational modelling study. <i>Journal of Neural Engineering, 2014, 11, 025002</i>	5	21
297	Simplified 2D Bidomain Model of Whole Heart Electrical Activity and ECG Generation. <i>Measurement Science Review, 2014, 14, 136-143</i>	1.7	9
296	The unique characteristics of ON and OFF retinal ganglion cells: a modeling study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 6096-9</i>	0.9	1
295	Convergence across tactile afferent types in primary and secondary somatosensory cortices. <i>PLoS ONE, 2014, 9, e107617</i>	3.7	12
294	Organic electrode coatings for next-generation neural interfaces. <i>Frontiers in Neuroengineering, 2014, 7, 15</i>		171
293	Numerical investigation of the effect of cannula placement on thrombosis. <i>Theoretical Biology and Medical Modelling, 2013, 10, 35</i>	2.3	25
292	Estimation of cardiac output and systemic vascular resistance using a multivariate regression model with features selected from the finger photoplethysmogram and routine cardiovascular measurements. <i>BioMedical Engineering OnLine, 2013, 12, 19</i>	4.1	13
291	Design of Safe Two-Wire Interface-Driven Chip-Scale Neurostimulator for Visual Prosthesis. <i>IEEE Journal of Solid-State Circuits, 2013, 48, 2217-2229</i>	5.5	18
290	Detrended fluctuation analysis of blood pressure in preterm infants with intraventricular hemorrhage. <i>Medical and Biological Engineering and Computing, 2013, 51, 1051-7</i>	3.1	7

289	Estimating cognitive workload using wavelet entropy-based features during an arithmetic task. <i>Computers in Biology and Medicine</i> , 2013 , 43, 2186-95	7	69
288	Smartphones as image processing systems for prosthetic vision. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 3690-3	0.9	2
287	Integrated electrode and high density feedthrough system for chip-scale implantable devices. <i>Biomaterials</i> , 2013 , 34, 6109-18	15.6	21
286	Attaining higher resolution visual prosthetics: a review of the factors and limitations. <i>Journal of Neural Engineering</i> , 2013 , 10, 011002	5	51
285	Simulation of a smart home environment 2013 ,		6
284	Physiological control of implantable rotary blood pumps for heart failure patients. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 675-8	0.9	2
283	Estimation of cardiac output and total peripheral resistance in preterm infants by arterial waveform analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 2308-11	0.9	
282	Modeling aortic valve closure under the action of a ventricular assist device. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 679-82	0.9	
281	Cell-specific modeling of retinal ganglion cell electrical activity. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 6539-42	0.9	4
280	Development of nanoparticle film-based multi-axial tactile sensors for biomedical applications. <i>Sensors and Actuators A: Physical</i> , 2013 , 196, 38-47	3.9	24
279	Developments in control systems for rotary left ventricular assist devices for heart failure patients: a review. <i>Physiological Measurement</i> , 2013 , 34, R1-27	2.9	71
278	Semi-static threshold-triggered delay elements for low power operation. <i>Analog Integrated Circuits and Signal Processing</i> , 2013 , 75, 435-445	1.2	1
277	Evaluation of suction detection during different pumping states in an implantable rotary blood pump. <i>Artificial Organs</i> , 2013 , 37, E145-54	2.6	7
276	Spatially restricted electrical activation of retinal ganglion cells in the rabbit retina by hexapolar electrode return configuration. <i>Journal of Neural Engineering</i> , 2013 , 10, 036013	5	28
275	Polymer micro-fiber Bragg grating. <i>Optics Letters</i> , 2013 , 38, 3359-62	3	22
274	Design of an unobtrusive system for fall detection in multiple occupancy residences. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 4690-3	0.9	7
273	Mapping activation in a sinoatrial node cardiac tissue preparation with a multi-electrode array. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 3777-80	0.9	
272	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> , 2013 , 2013, 6957-60	0.9	20

271	Influence of active dendrites on firing patterns in a retinal ganglion cell model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 4557-60</i>	0.9	1
270	Exercise studies in patients with rotary blood pumps: cause, effects, and implications for startling-like control of changes in pump flow. <i>Artificial Organs, 2013, 37, 695-703</i>	2.6	32
269	Current steering for high resolution retinal implants. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 2760-3</i>	0.9	1
268	Prediction of chronic obstructive pulmonary disease exacerbation using physiological time series patterns. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 6784-7</i>	0.9	
267	Influence of cell morphology in a computational model of ON and OFF retinal ganglion cells. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 4553-6</i>	0.9	3
266	A continuum neuronal tissue model based on a two-compartmental representation of cells. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 6543-6</i>	0.9	1
265	Comparison of three right-unilateral electroconvulsive therapy montages. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 819-22</i>	0.9	1
264	Current steering in retinal stimulation via a quasimonopolar stimulation paradigm 2013, 54, 4307-20		58
263	Electrical stimulation of inner retinal neurons in wild-type and retinally degenerate (rd/rd) mice. <i>PLoS ONE, 2013, 8, e68882</i>	3.7	19
262	Quasi-monopolar stimulation: a novel electrode design configuration for performance optimization of a retinal neuroprosthesis. <i>PLoS ONE, 2013, 8, e73130</i>	3.7	9
261	A cardiovascular mathematical model of graded head-up tilt. <i>PLoS ONE, 2013, 8, e77357</i>	3.7	23
260	A simplified 3D model of whole heart electrical activity and 12-lead ECG generation. <i>Computational and Mathematical Methods in Medicine, 2013, 2013, 134208</i>	2.8	30
259	Optimisation of a generic ionic model of cardiac myocyte electrical activity. <i>Computational and Mathematical Methods in Medicine, 2013, 2013, 706195</i>	2.8	9
258	Optimisation of ionic models to fit tissue action potentials: application to 3D atrial modelling. <i>Computational and Mathematical Methods in Medicine, 2013, 2013, 951234</i>	2.8	11
257	Erratum to Optimisation of a Generic Ionic Model of Cardiac Myocyte Electrical Activity□ <i>Computational and Mathematical Methods in Medicine, 2013, 2013, 1-1</i>	2.8	78
256	Sensitivity analysis of left ventricle with dilated cardiomyopathy in fluid structure simulation. <i>PLoS ONE, 2013, 8, e67097</i>	3.7	7
255	Design of a Decision Support System for a Home Telehealth Application. <i>International Journal of E-Health and Medical Communications, 2013, 4, 68-79</i>	1.4	9
254	Sensor-based fall risk assessment - dagger of the mind?. <i>Studies in Health Technology and Informatics, 2013, 192, 1048</i>	0.5	

253	Substrate dependent stability of conducting polymer coatings on medical electrodes. <i>Biomaterials</i> , 2012 , 33, 5875-86	15.6	147
252	A review of tactile sensing technologies with applications in biomedical engineering. <i>Sensors and Actuators A: Physical</i> , 2012 , 179, 17-31	3.9	441
251	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> , 2012 , 45, 694-706	2.7	42
250	Study of cardiac pacemaker excitation using generic ionic models and realistic cell distribution. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 195-8	0.9	2
249	Simulated unobtrusive falls detection with multiple persons. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 3185-96	5	23
248	Sensors-Based Wearable Systems for Monitoring of Human Movement and Falls. <i>IEEE Sensors Journal</i> , 2012 , 12, 658-670	4	179
247	Comparison of preload-sensitive pressure and flow controller strategies for a dual device biventricular support system. <i>Artificial Organs</i> , 2012 , 36, 256-65	2.6	19
246	Numerical optimization studies of cardiovascular-rotary blood pump interaction. <i>Artificial Organs</i> , 2012 , 36, E110-24	2.6	20
245	Theoretical foundations of a Starling-like controller for rotary blood pumps. <i>Artificial Organs</i> , 2012 , 36, 787-96	2.6	52
244	Bionic vision: system architectures: a review. <i>Expert Review of Medical Devices</i> , 2012 , 9, 33-48	3.5	54
243	An evaluation study of nanoparticle films as biomimetic tactile sensors. <i>Sensors and Actuators A: Physical</i> , 2012 , 186, 148-153	3.9	8
242	Modeling normal and rebound excitation in mammalian retinal ganglion cells. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 5506-9	0.9	1
241	Recent advances in the monitoring and control of haemodynamic variables during haemodialysis: a review. <i>Physiological Measurement</i> , 2012 , 33, R1-R31	2.9	11
240	2012 ,		12
239	Efficacy of the hexpolar configuration in localizing the activation of retinal ganglion cells under electrical stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 2776-9	0.9	1
238	Responses of retinal ganglion cells to extracellular electrical stimulation, from single cell to population: model-based analysis. <i>PLoS ONE</i> , 2012 , 7, e53357	3.7	39
237	Effect of parameter variations on the hemodynamic response under rotary blood pump assistance. <i>Artificial Organs</i> , 2012 , 36, E125-37	2.6	13
236	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> , 2012 , 302, H826-36	5.2	20

235	Conductive hydrogels: mechanically robust hybrids for use as biomaterials. <i>Macromolecular Bioscience</i> , 2012 , 12, 494-501	5.5	147
234	Classification of Working Memory Load Using Wavelet Complexity Features of EEG Signals. <i>Lecture Notes in Computer Science</i> , 2012 , 692-699	0.9	4
233	In vitro biocompatibility of various polymer-based microelectrode arrays for retinal prosthesis 2012 , 53, 2653-7		44
232	Computational model of electrical stimulation of a retinal ganglion cell with hexagonally arranged electrodes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 3029-32	0.9	2
231	Energy expenditure estimation during normal ambulation using triaxial accelerometry and barometric pressure. <i>Physiological Measurement</i> , 2012 , 33, 1811-30	2.9	13
230	Characterization of memory load in an arithmetic task using non-linear analysis of EEG signals. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 3519-22	0.9	12
229	Convolution based method for calculating inputs from dendritic fields in a continuum model of the retina. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 215-8	0.9	1
228	Measuring the electric field of bioelectrodes in saline during stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 807-10	0.9	
227	Electrocardiogram signal quality measures for unsupervised telehealth environments. <i>Physiological Measurement</i> , 2012 , 33, 1517-33	2.9	54
226	Applications of supervised learning to biological signals: ECG signal quality and systemic vascular resistance. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 57-60	0.9	3
225	Web versus app: compliance of patients in a telehealth diabetes management programme using two different technologies. <i>Journal of Telemedicine and Telecare</i> , 2012 , 18, 476-80	6.8	18
224	Nanoparticle films as biomimetic tactile sensors. <i>Procedia Engineering</i> , 2011 , 25, 1349-1352		6
223	2011 ,		6
222	Towards a chip scale neurostimulator: system architecture of a current-driven 98 channel neurostimulator via a two-wire 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> , 2011 , 2011, 6737-40	0.9	7
221	A semi-static threshold-triggered delay element for low power applications 2011 ,		4
220	A computer control system for the regulation of blood volume, heart rate and blood pressure during kidney dialysis. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 14277-14282		
219	Contribution of arterial Windkessel in low-frequency cerebral hemodynamics during transient changes in blood pressure. <i>Journal of Applied Physiology</i> , 2011 , 110, 917-25	3.7	32
218	A method for control of an implantable rotary blood pump for heart failure patients using noninvasive measurements. <i>Artificial Organs</i> , 2011 , 35, E174-80	2.6	13

217	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> , 2011 , 35, 807-13	2.6	20
216	Identification and control for automated regulation of hemodynamic variables during hemodialysis. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 1686-97	5	16
215	Spectral analysis of accelerometry signals from a directed-routine for falls-risk estimation. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58,	5	30
214	Peripheral photoplethysmography variability analysis of sepsis patients. <i>Medical and Biological Engineering and Computing</i> , 2011 , 49, 337-47	3.1	22
213	Fingertip photoplethysmographic waveform variability and systemic vascular resistance in intensive care unit patients. <i>Medical and Biological Engineering and Computing</i> , 2011 , 49, 859-66	3.1	19
212	Electrochemical stability of poly(ethylene dioxythiophene) electrodes 2011 ,		2
211	A continuum model of retinal electrical stimulation. <i>Journal of Neural Engineering</i> , 2011 , 8, 066006	5	17
210	ARM-based visual processing system for prosthetic vision. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 3921-4	0.9	5
209	Temporo-spatial model construction using the MML and software framework. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 3528-31	5	1
208	Electrode design to optimize ganglion cell activation in a retinal neuroprosthesis: A modeling study 2011 ,		2
207	Characterization of a capacitive tactile shear sensor for application in robotic and upper limb prostheses. <i>Sensors and Actuators A: Physical</i> , 2011 , 165, 164-172	3.9	51
206	Tissue-based optimization of a sino-atrial node disc model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 1375-8	0.9	2
205	Classification between non-multiple fallers and multiple fallers using a triaxial accelerometry-based system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 1499-502	0.9	6
204	Parameter fitting using multiple datasets in cardiac action potential modeling. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 158-61	0.9	0
203	Cerebral near-infrared spectroscopy analysis in preterm infants with intraventricular hemorrhage. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 1937-40	0.9	3
202	Multivariate classification of systemic vascular resistance using photoplethysmography. <i>Physiological Measurement</i> , 2011 , 32, 1117-32	2.9	14
201	Process development for dry etching polydimethylsiloxane for neural electrodes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 2977-80	0.9	2
200	Laser-micromachined, chip-scaled ceramic carriers for implantable neurostimulators. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 1085-8	0.9	1

199	Chip-scale hermetic feedthroughs for implantable bionics. <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, 6717-20</i>	0.9	12
198	Photoplethysmographic variability analysis in critical care--current progress and future challenges. <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, 5507-10</i>	0.9	2
197	Spectral analysis of systemic and cerebral cardiovascular variabilities in preterm infants: relationship with clinical risk index for babies (CRIB). <i>Physiological Measurement, 2011, 32, 1913-28</i>	2.9	10
196	Identification of high-risk acute coronary syndromes by spectral analysis of ear photoplethysmographic waveform variability. <i>Physiological Measurement, 2011, 32, 1181-92</i>	2.9	10
195	Frequency-dependent reduction of voltage-gated sodium current modulates retinal ganglion cell response rate to electrical stimulation. <i>Journal of Neural Engineering, 2011, 8, 066007</i>	5	19
194	Activation of retinal ganglion cells following epiretinal electrical stimulation with hexagonally arranged bipolar electrodes. <i>Journal of Neural Engineering, 2011, 8, 035004</i>	5	40
193	Signal quality measures for pulse oximetry through waveform morphology analysis. <i>Physiological Measurement, 2011, 32, 369-84</i>	2.9	90
192	Design of an unobtrusive wireless sensor network for nighttime falls 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, 5275-8</i>	0.9	14
191	Image Analysis, Information Theory and Prosthetic Vision 2011, 343-353		
190	Encoding of tangential torque in responses of tactile afferent fibres innervating the fingerpad of the monkey. <i>Journal of Physiology, 2010, 588, 1057-72</i>	3.9	32
189	Augmented photoplethysmographic low frequency waves at the onset of endotoxic shock in rabbits. <i>Physiological Measurement, 2010, 31, 1605-21</i>	2.9	10
188	Evaluation of stimulus parameters and electrode geometry for an effective suprachoroidal retinal prosthesis. <i>Journal of Neural Engineering, 2010, 7, 036008</i>	5	65
187	Software simulation of unobtrusive falls detection at night-time using passive infrared and pressure mat sensors. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2115-8</i>	0.9	13
186	A guideline-based decision support system for generating referral recommendations from routinely recorded home telehealth measurement data. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 4111-6</i>	0.9	7
185	Pulse transit time variability analysis in an animal model of endotoxic shock. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2849-52</i>	0.9	2
184	Telehealth technologies for managing chronic disease - experiences from Australia and the UK. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 5267-9</i>	0.9	5
183	A continuum model of the retinal network and its response to electrical stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2077-80</i>	0.9	4
182	Online estimation of respiratory mechanics in non-invasive pressure support ventilation: a bench model study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2489-92</i>	0.9	2

181	Modeling of microcavity electrodes for medical implants. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 1515-8</i>	0.9	1
180	MML toolkit and work flow overview: Creating temporo-spatial heart models from CellML. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 1481-4</i>	0.9	1
179	A generic ionic model of cardiac action potentials. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 1465-8</i>	0.9	2
178	Respiration-induced changes in ear photoplethysmography relates to relative blood volume during hemodialysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 1465-8</i>	0.9	2
177	Experimental validation of a polyvinylidene fluoride sensing element in a tactile sensor. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 5760-3</i>	0.9	1
176	Effect of ECG quality measures on piecewise-linear trend detection for telehealth decision support systems. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2877-80</i>	0.9	1
175	Activation of ganglion cell axons following epiretinal electrical stimulation with hexagonal electrodes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 6753-6</i>	0.9	1
174	Energy expenditure estimation 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, 2010, 2010, 5185-8</i>	0.9	12
173	Discrete cortical responses from multi-site supra-choroidal electrical stimulation in the feline retina. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 5879-82</i>	0.9	4
172	Ultrasound user-identification for wireless sensor networks. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 5756-9</i>	0.9	3
171	Linear parameter varying system based modeling of hemodynamic response to profiled hemodialysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 4967-70</i>	0.9	4
170	Automatic segmentation of triaxial accelerometry signals for falls risk estimation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 2234-7</i>	0.9	13
169	A transparent electrode array for simultaneous cortical potential recording and intrinsic signal optical imaging. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 1796-9</i>	0.9	1
168	Modeling and control of an implantable rotary blood pump for heart failure patients 2010,		1
167	Sensorless estimation of inlet pressure in implantable rotary blood pump for heart failure patients. <i>Electronics Letters, 2010, 46, 481</i>	1.1	4
166	Biosignal Processing to Meet the Emerging Needs of Telehealth Monitoring Environments. <i>Lecture Notes in Electrical Engineering, 2010, 263-280</i>	0.2	4
165	Frequency spectrum analysis of finger photoplethysmographic waveform variability during haemodialysis. <i>Physiological Measurement, 2010, 31, 1203-16</i>	2.9	25
164	Conducting polymer electrodes for visual prostheses. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2010, 2010, 6769-72</i>	0.9	5

163	Non-invasive classification of severe sepsis and systemic inflammatory response syndrome using a nonlinear support vector machine: a preliminary study. <i>Physiological Measurement</i> , 2010 , 31, 775-93	2.9	33
162	Development of bioactive conducting polymers for neural interfaces. <i>Expert Review of Medical Devices</i> , 2010 , 7, 35-49	3.5	55
161	An anatomically realistic 3d model of atrial propagation based on experimentally recorded action potentials. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 243-6	0.9	2
160	Can triaxial accelerometry accurately recognize inclined walking terrains?. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 2506-16	5	27
159	Biosignal quality detection: An essential feature for unsupervised telehealth applications 2010 ,		7
158	Cytotoxicity of implantable microelectrode arrays produced by laser micromachining. <i>Biomaterials</i> , 2010 , 31, 886-93	15.6	27
157	Parameter-optimized model of cardiovascular-rotary blood pump interactions. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 254-66	5	52
156	Longitudinal falls-risk estimation using triaxial accelerometry. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 534-41	5	73
155	Design of a decision-support architecture for management of remotely monitored patients. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2010 , 14, 1216-26		34
154	Barometric pressure and triaxial accelerometry-based falls event detection. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2010 , 18, 619-27	4.8	218
153	Biological Machine Systems Integration: Engineering the Neural Interface. <i>Proceedings of the IEEE</i> , 2010 , 98, 418-431	14.3	12
152	Nanostructured Conductive Polymers as Biomaterials 2010 , 707-736		4
151	Impact of co-incorporating laminin peptide dopants and neurotrophic growth factors on conducting polymer properties. <i>Acta Biomaterialia</i> , 2010 , 6, 63-71	10.8	153
150	Noninvasive activity-based control of an implantable rotary blood pump: comparative software simulation study. <i>Artificial Organs</i> , 2010 , 34, E34-45	2.6	22
149	Classifying Torque, Normal Force and Direction Using Monkey Afferent Nerve Spike Rates. <i>Lecture Notes in Computer Science</i> , 2010 , 43-50	0.9	4
148	Stimulation of the Retinal Network in Bionic Vision Devices: From Multi-Electrode Arrays to Pixelated Vision. <i>Lecture Notes in Computer Science</i> , 2010 , 140-147	0.9	5
147	Home telecare study for patients with chronic lung disease in the Sydney West Area Health Service. <i>Studies in Health Technology and Informatics</i> , 2010 , 161, 139-48	0.5	9
146	Direct activation and temporal response properties of rabbit retinal ganglion cells following subretinal stimulation. <i>Journal of Neurophysiology</i> , 2009 , 102, 2982-93	3.2	94

145	Experimental validation of a tactile sensor model for a robotic hand. <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, 2300-3</i>	0.9	5
144	Changes in the spectral powers of finger photoplethysmographic waveform variability in hemodialysis patients. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference,</i>	0.9	2
143	Automated detection of asynchrony in patient-ventilator interaction. <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, 5324-7</i>	0.9	8
142	Noninvasive deadbeat control of an implantable rotary blood pump: a simulation study. <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, 2855-8</i>	0.9	3
141	The use of an Energy Monitor in the management of diabetes: a pilot study. <i>Diabetes Technology and Therapeutics, 2009, 11, 113-8</i>	8.1	9
140	Evaluation of functional deficits and falls risk in the elderly--methods for preventing falls. <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, 6179-82</i>	0.9	6
139	Modelling heart beat initiation and propagation using the MML framework. <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, 4495-8</i>	0.9	3
138	Transfer function analysis of baroreflex function in a rabbit model of endotoxic shock. <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, 1848-51</i>	0.9	1
137	An investigation of the impact of gait segmentation on accelerometry-based inclined terrain classification 2009,		1
136	Performance of laser fabricated stimulating electrode arrays for a retinal prosthesis in saline 2009,		6
135	Spectral analysis of heart period and pulse transit time derived from electrocardiogram and photoplethysmogram in sepsis patients. <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, 1781-4</i>	0.9	7
134	Design, simulation and fabrication of a low cost capacitive tactile shear sensor for a robotic hand. <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, 4132-5</i>	0.9	8
133	Simulating prosthetic vision: I. Visual models of phosphenes. <i>Vision Research, 2009, 49, 1493-506</i>	2.1	98
132	Focal activation of the feline retina via a suprachoroidal electrode array. <i>Vision Research, 2009, 49, 825-33.1</i>		116
131	Simulating prosthetic vision: II. Measuring functional capacity. <i>Vision Research, 2009, 49, 2329-43</i>	2.1	43
130	A wearable real-time image processor for a vision prosthesis. <i>Computer Methods and Programs in Biomedicine, 2009, 95, 258-69</i>	6.9	13
129	Changes in left ventricular ejection time and pulse transit time derived from finger photoplethysmogram and electrocardiogram during moderate haemorrhage. <i>Clinical Physiology and Functional Imaging, 2009, 29, 163-9</i>	2.4	10
128	Cell attachment functionality of bioactive conducting polymers for neural interfaces. <i>Biomaterials, 2009, 30, 3637-44</i>	15.6	222

127	Non-invasive estimation of pulsatile flow and differential pressure in an implantable rotary blood pump for heart failure patients. <i>Physiological Measurement</i> , 2009 , 30, 371-86	2.9	28
126	Classification of walking patterns on inclined surfaces from accelerometry data 2009 ,		11
125	Assessing the blood volume and heart rate responses during haemodialysis in fluid overloaded patients using support vector regression. <i>Physiological Measurement</i> , 2009 , 30, 1251-66	2.9	14
124	A morphologically realistic shell model of atrial propagation and ablation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 4512-5	0.9	1
123	Piecewise-linear trend detection in longitudinal physiological measurements. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 3413-6	0.9	3
122	Direct activation of retinal ganglion cells with subretinal stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 618-21	0.9	6
121	RBF kernel based support vector regression to estimate the blood volume and heart rate responses during hemodialysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 4352-5	0.9	9
120	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> , 2009 , 2009, 6111-4	0.9	23
119	Linear predictive modelling of gait patterns 2009 ,		3
118	Bioactive conducting polymers for neural interfaces application to vision prosthesis 2009 ,		8
117	A Review of Wireless Sensor Networks for Wellness Monitoring in Residential Aged Care. <i>International Journal of Healthcare Delivery Reform Initiatives</i> , 2009 , 1, 32-47		
116	Image analysis for microelectronic retinal prosthesis. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 344-6	5	12
115	Noninvasive average flow and differential pressure estimation for an implantable rotary blood pump using dimensional analysis. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 2094-101	5	23
114	Patients' perceptions of a home telecare system. <i>International Journal of Medical Informatics</i> , 2008 , 77, 486-98	5.3	109
113	Feature extraction using an AM-FM model for gait pattern classification 2008 ,		2
112	Accelerometry based classification of gait patterns using empirical mode decomposition. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 2008 ,	1.6	18
111	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> , 2008 , 2008, 2840-3	0.9	24
110	Gait pattern classification using compact features extracted from intrinsic mode functions. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2008 , 2008, 3852-5	0.9	10

109	Finite element analysis of a tactile sensor for a robotic hand 2008 ,		4
108	NONINVASIVE DETECTION OF SUCTION IN AN IMPLANTABLE ROTARY BLOOD PUMP USING NEURAL NETWORKS. <i>International Journal of Computational Intelligence and Applications</i> , 2008 , 07, 237-247	1.2	13
107	Implant electronics for intraocular epiretinal neuro-stimulators 2008 ,		5
106	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> , 2008 , 2008, 2869-72	0.9	29
105	Detecting change in left ventricular ejection time during head-up tilt-induced progressive central hypovolemia using a finger photoplethysmographic pulse oximetry wave form. <i>Journal of Trauma</i> , 2008 , 64, 390-7		3
104	Gait patterns classification using spectral features 2008 ,		20
103	Novel neural interface for implant electrodes: improving electroactivity of polypyrrole through MWNT incorporation. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 1625-9	4.5	55
102	Spectral analysis of finger photoplethysmographic waveform variability in a model of mild to moderate haemorrhage. <i>Journal of Clinical Monitoring and Computing</i> , 2008 , 22, 343-53	2	33
101	Conducting polymers for neural interfaces: challenges in developing an effective long-term implant. <i>Biomaterials</i> , 2008 , 29, 3393-9	15.6	609
100	Time-Frequency Based Features for Classification of Walking Patterns 2007 ,		15
99	Automatic detection of left ventricular ejection time from a finger photoplethysmographic pulse oximetry waveform: comparison with Doppler aortic measurement. <i>Physiological Measurement</i> , 2007 , 28, 439-52	2.9	31
98	Accelerometry based classification of walking patterns using time-frequency analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 4899-902		34
97	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> , 2007 , 2007, 4037-40		26
96	Noninvasive average flow estimation for an implantable rotary blood pump: a new algorithm incorporating the role of blood viscosity. <i>Artificial Organs</i> , 2007 , 31, 45-52	2.6	39
95	Classification of physiologically significant pumping states in an implantable rotary blood pump: effects of cardiac rhythm disturbances. <i>Artificial Organs</i> , 2007 , 31, 476-9	2.6	8
94	Retinal neurostimulator for a multifocal vision prosthesis. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2007 , 15, 425-34	4.8	67
93	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> , 2007 , 21, 283-93	2	42
92	Field Markup Language: biological field representation in XML. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 402-5		2

91	Noninvasive pulsatile flow estimation for an implantable rotary blood pump. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 1018-21		7
90	Finite element bidomain model of epiretinal stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 1132-5		3
89	Parameter identifiability of cardiac ionic models using a novel CellML least squares optimization tool. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 5307-10		7
88	A quantitative analysis of head movement behaviour during visual acuity assessment under prosthetic vision simulation. <i>Journal of Neural Engineering, 2007</i> , 4, S108-23	5	27
87	Computational model of atrial electrical activation and propagation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 908-11		10
86	Optical imaging of electrically evoked visual signals in cats: II. ICA "harmonic filtering" noise reduction. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 3380-3		4
85	A dynamic lumped parameter model of the left ventricular assisted circulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 3990-3		7
84	The business case for home telecare: a comparative analysis between the USA, Europe and Australasia. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 6152		1
83	Simulating auditory and visual sensorineural prostheses: a comparative review. <i>Journal of Neural Engineering, 2007</i> , 4, S58-71	5	17
82	Optical imaging of electrically evoked visual signals in cats: I. Responses to corneal and intravitreal electrical stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2007</i> , 2007, 1132-5	0.9	1
81	Evaluation of PIR detector characteristics for monitoring occupancy patterns of elderly people living alone at home. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 3802-5		12
80	Classification of physiologically significant pumping states in an implantable rotary blood pump: patient trial results. <i>ASAIO Journal, 2007</i> , 53, 617-22	3.6	13
79	A decision support architecture for telecare patient management of chronic and complex disease. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007</i> , 2007, 4335-8		11
78	Fabrication of multi-layer, high-density micro-electrode arrays for neural stimulation and bio-signal recording 2007 ,		21
77	Novel Neural Interface for Vision Prosthesis Electrodes: Improving Electrical and Mechanical Properties through Layering 2007 ,		8
76	Patterning of Silicone Rubber for Micro-Electrode Array Fabrication 2007 ,		9
75	Bank note recognition for the vision impaired. <i>Australasian Physical and Engineering Sciences in Medicine, 2006</i> , 29, 229-33	1.9	17
74	A comparison of 1-D models of cardiac pacemaker heterogeneity. <i>IEEE Transactions on Biomedical Engineering, 2006</i> , 53, 164-77	5	9

73	Implementation of a real-time human movement classifier using a triaxial accelerometer for ambulatory monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2006 , 10, 156-67		812
72	Psychophysics of prosthetic vision: III. stochastic rendering, the phosphene image, and perception. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 1169-72		3
71	Automated non-invasive detection of pumping states in an implantable rotary blood pump. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 5386-9		7
70	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> , 2006 , 2006, 3600-3		26
69	Psychophysics of prosthetic vision: II. stochastic sampling, the phosphene image, and noise. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 1634-7		5
68	Classification of a known sequence of motions and postures from accelerometry data using adapted Gaussian mixture models. <i>Physiological Measurement</i> , 2006 , 27, 935-51	2.9	121
67	The design and testing of an epi-retinal vision prosthesis neurostimulator capable of concurrent parallel stimulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 4700-9		5
66	A clinical monitoring and management system for residential aged care facilities. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 3301-4		7
65	Identification and classification of physiologically significant pumping states in an implantable rotary blood pump. <i>Artificial Organs</i> , 2006 , 30, 671-9	2.6	43
64	Simulated prosthetic visual fixation, saccade, and smooth pursuit. <i>Vision Research</i> , 2005 , 45, 775-88	2.1	32
63	Reliability of cardiorespiratory measurements with a new ergospirometer during intense treadmill exercise in Thoroughbred horses. <i>Veterinary Journal</i> , 2005 , 169, 223-31	2.5	13
62	A bidomain model of epiretinal stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2005 , 13, 137-46	4.8	41
61	Learning prosthetic vision: a virtual-reality study. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2005 , 13, 249-55	4.8	19
60	Visual acuity measurement of prosthetic vision: a virtual-reality simulation study. <i>Journal of Neural Engineering</i> , 2005 , 2, S135-45	5	53
59	Designing home telecare: a case study in monitoring cystic fibrosis. <i>Telemedicine Journal and E-Health</i> , 2005 , 11, 707-19	5.9	9
58	In-vitro testing of simultaneous charge injection and recovery in a retinal neuroprosthesis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2005 , 2005, 7612-5		9
57	Current distribution during parallel stimulation: implications for an epiretinal neuroprosthesis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2005 , 2005, 5242-5		10
56	Estimation of pressure pulse amplification between aorta and brachial artery using stepwise multiple regression models. <i>Physiological Measurement</i> , 2004 , 25, 879-89	2.9	25

55	A gradient model of cardiac pacemaker myocytes. <i>Progress in Biophysics and Molecular Biology</i> , 2004 , 85, 301-23	4.7	25
54	Parameter estimation in cardiac ionic models. <i>Progress in Biophysics and Molecular Biology</i> , 2004 , 85, 407-411	4.7	68
53	Classification of basic daily movements using a triaxial accelerometer. <i>Medical and Biological Engineering and Computing</i> , 2004 , 42, 679-87	3.1	300
52	A home health monitoring system including intelligent reporting and alerts. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 3151-4		8
51	Towards photosensor movement-adaptive image analysis in an electronic retinal prosthesis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4165-8		5
50	An efficient multiplexing method for addressing large numbers of electrodes in a visual neuroprosthesis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4174-7		13
49	Effect on prosthetic vision visual acuity by filtering schemes, filter cut-off frequency and phosphene matrix: a virtual reality simulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4201-4		9
48	Accelerometry: providing an integrated, practical method for long-term, ambulatory monitoring of human movement. <i>Physiological Measurement</i> , 2004 , 25, R1-20	2.9	555
47	A pilot study of long-term monitoring of human movements in the home using accelerometry. <i>Journal of Telemedicine and Telecare</i> , 2004 , 10, 144-51	6.8	107
46	Contribution to the theory of prosthetic vision. <i>ASAIO Journal</i> , 2004 , 50, 392-6	3.6	17
45	Two-way actuation of bilayer cantilever of nickel titanium and silicon nitride thin films by shape memory effect and stress relaxation 2004 , 5276, 351		2
44	Using information technology to improve the management of chronic disease. <i>Medical Journal of Australia</i> , 2003 , 179, 242-6	4	128
43	Detection of daily physical activities using a triaxial accelerometer. <i>Medical and Biological Engineering and Computing</i> , 2003 , 41, 296-301	3.1	166
42	Fabrication of platinum spherical electrodes in an intra-ocular prosthesis using high-energy electrical discharge. <i>Sensors and Actuators A: Physical</i> , 2003 , 108, 155-161	3.9	13
41	Development and surgical implantation of a vision prosthesis model into the ovine eye. <i>Clinical and Experimental Ophthalmology</i> , 2002 , 30, 36-40	2.4	22
40	Vagal entrainment of heart rate is simulated by an integrator with feedback. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2001 , 24, 86-94	1.9	
39	CMOS neurostimulation ASIC with 100 channels, scaleable output, and bidirectional radio-frequency telemetry. <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 248-60	5	120
38	Comment on "limit cycle oscillations in pacemaker cells". <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 499-500	5	1

37	Inhomogeneity of action potential waveshape assists frequency entrainment of cardiac pacemaker cells. <i>IEEE Transactions on Biomedical Engineering</i> , 2001 , 48, 1108-15	5	3
36	Web-based acquisition, storage, and retrieval of biomedical signals. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2001 , 20, 38-44		39
35	Sensorless flow and head estimation in the VentrAssist rotary blood pump. <i>Artificial Organs</i> , 2000 , 24, 585-8	2.6	37
34	The potential impact of home telecare on clinical practice. <i>Medical Journal of Australia</i> , 1999 , 171, 518-21		67
33	Information technology in primary health care. <i>International Journal of Medical Informatics</i> , 1999 , 55, 9-22	5.3	28
32	A web-based approach for electrocardiogram monitoring in the home. <i>International Journal of Medical Informatics</i> , 1999 , 54, 145-53	5.3	56
31	Research and clinical assessment of eating and exercise behaviour. <i>British Journal of Hospital Medicine</i> , 1999 , 60, 481-5		26
30	The bionic eye (electronic visual prosthesis): a review. <i>Australian and New Zealand Journal of Ophthalmology</i> , 1998 , 26, 195-202		34
29	Review of ionic models of vagal-cardiac pacemaker control. <i>Journal of Theoretical Biology</i> , 1998 , 192, 265-74	2.3	8
28	Simulations of postvagal tachycardia at the single cell pacemaker level: a new hypothesis. <i>Annals of Biomedical Engineering</i> , 1997 , 25, 769-82	4.7	1
27	Class III Antiarrhythmic Effects of Dofetilide in Rabbit Atrial Myocardium. <i>Journal of Cardiovascular Pharmacology and Therapeutics</i> , 1996 , 1, 229-234	2.6	3
26	Ion currents underlying sinoatrial node pacemaker activity: a new single cell mathematical model. <i>Journal of Theoretical Biology</i> , 1996 , 181, 245-72	2.3	112
25	Vagal control of sinoatrial rhythm: a mathematical model. <i>Journal of Theoretical Biology</i> , 1996 , 182, 21-44	4.3	31
24	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> , 1995 , 40, 147-55		114
23	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> , 1993 , 21, 321-35	4.7	20
22	Dynamics of cardiac period responses after prolonged vagal stimulation in the dog. <i>Annals of Biomedical Engineering</i> , 1991 , 19, 273-89	4.7	7
21	A retinal neuroprosthesis design based on simultaneous current injection		10
20	Simulation of parallel current injection for use in a vision prosthesis		13

19	Advances in Retinal Neuroprosthetics337-356	10
18	Practical Considerations in Retinal Neuroprosthesis Design401-418	1
17	Retinal Image and Phosphene Image: An Analogy297-307	
16	Identifying physiologically significant pumping states in implantable rotary blood pumps using non-invasive system observers	1
15	Phosphene vision: development of a portable visual prosthesis system for the blind	8
14	A 2D monodomain model of rabbit sinoatrial node	2
13	Cell-specific ionic models of cardiac pacemaker activity	1
12	Home telecare for chronic disease management	7
11	The effect of heartbeat-synchronised running on the cardiovascular system	1
10	Managing chronic disease with home telecare: a system architecture and case study	9
9	Determining activity using a triaxial accelerometer	26
8	Methodology for designing telecare systems: a case study in cystic fibrosis monitoring	1
7	Identifying physiologically significant pumping state transitions in implantable rotary blood pumps used as left ventricular assist devices: an in-vivo study	2
6	Characterising the discrete wavelet transform of an ECG signal with simple parameters for use in automated diagnosis	2
5	A 100 channel neural stimulator for excitation of retinal ganglion cells	2
4	Web based longitudinal ECG monitoring	9
3	A Review of Wireless Sensor Networks for Wellness Monitoring in Residential Aged Care294-310	
2	Trans-retinal electrical stimulation using a neuroprosthesis: the effects of damage to the R-Membrane	1

- 1 Pervasive Networks and Ubiquitous Monitoring for Wellness Monitoring in Residential Aged Care1-24