

Jari A Hyttinen

List of Publications by Citations

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

240
papers

3,512
citations

32
h-index

49
g-index

279
ext. papers

4,180
ext. citations

3.1
avg, IF

5.34
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 240 | Model for long QT syndrome type 2 using human iPS cells demonstrates arrhythmogenic characteristics in cell culture. <i>DMM Disease Models and Mechanisms</i> , 2012 , 5, 220-30 | 4.1 | 228 |
| 239 | Toward the defined and xeno-free differentiation of functional human pluripotent stem cell-derived retinal pigment epithelial cells. <i>Molecular Vision</i> , 2011 , 17, 558-75 | 2.3 | 110 |
| 238 | Targeted exercises against hip fragility. <i>Osteoporosis International</i> , 2009 , 20, 1321-8 | 5.3 | 95 |
| 237 | Human embryonic stem cell-derived neuronal cells form spontaneously active neuronal networks in vitro. <i>Experimental Neurology</i> , 2009 , 218, 109-16 | 5.7 | 87 |
| 236 | Arterial pulse wave velocity in relation to carotid intima-media thickness, brachial flow-mediated dilation and carotid artery distensibility: the Cardiovascular Risk in Young Finns Study and the Health 2000 Survey. <i>Atherosclerosis</i> , 2012 , 220, 387-93 | 3.1 | 77 |
| 235 | Surface curvature in triply-periodic minimal surface architectures as a distinct design parameter in preparing advanced tissue engineering scaffolds. <i>Biofabrication</i> , 2017 , 9, 025001 | 10.5 | 75 |
| 234 | Novel polypyrrole-coated polylactide scaffolds enhance adipose stem cell proliferation and early osteogenic differentiation. <i>Tissue Engineering - Part A</i> , 2013 , 19, 882-92 | 3.9 | 74 |
| 233 | Computational models of ventricular- and atrial-like human induced pluripotent stem cell derived cardiomyocytes. <i>Annals of Biomedical Engineering</i> , 2013 , 41, 2334-48 | 4.7 | 68 |
| 232 | Wireless, multipurpose in-home health monitoring platform: two case trials. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2010 , 14, 447-55 | | 66 |
| 231 | Effect of pressure and padding on motion artifact of textile electrodes. <i>BioMedical Engineering OnLine</i> , 2013 , 12, 26 | 4.1 | 65 |
| 230 | The effects of vibration loading on adipose stem cell number, viability and differentiation towards bone-forming cells. <i>Journal of the Royal Society Interface</i> , 2011 , 8, 1736-47 | 4.1 | 63 |
| 229 | Assessment of pulmonary flow using impedance pneumography. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 2277-85 | 5 | 61 |
| 228 | Video image-based analysis of single human induced pluripotent stem cell derived cardiomyocyte beating dynamics using digital image correlation. <i>BioMedical Engineering OnLine</i> , 2014 , 13, 39 | 4.1 | 57 |
| 227 | Similarly derived and cultured hESC lines show variation in their developmental potential towards neuronal cells in long-term culture. <i>Regenerative Medicine</i> , 2010 , 5, 749-62 | 2.5 | 56 |
| 226 | Measurement of noise and impedance of dry and wet textile electrodes, and textile electrodes with hydrogel. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 6012-5 | | 55 |
| 225 | Substantial variation in the cardiac differentiation of human embryonic stem cell lines derived and propagated under the same conditions--a comparison of multiple cell lines. <i>Annals of Medicine</i> , 2009 , 41, 360-70 | 1.5 | 53 |
| 224 | Finite element analysis of customized reconstruction plates for mandibular continuity defect therapy. <i>Journal of Biomechanics</i> , 2014 , 47, 264-8 | 2.9 | 49 |

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| 223 | Burst analysis tool for developing neuronal networks exhibiting highly varying action potential dynamics. <i>Frontiers in Computational Neuroscience</i> , 2012 , 6, 38 | 3.5 | 49 |
| 222 | Sensitivity distributions of impedance cardiography using band and spot electrodes analyzed by a three-dimensional computer model. <i>Annals of Biomedical Engineering</i> , 1998 , 26, 694-702 | 4.7 | 49 |
| 221 | Micro CT visualization of silver nanoparticles in the middle and inner ear of rat and transportation pathway after transtympanic injection. <i>Journal of Nanobiotechnology</i> , 2015 , 13, 5 | 9.4 | 48 |
| 220 | DexterNet: An Open Platform for Heterogeneous Body Sensor Networks and its Applications 2009 , | | 48 |
| 219 | Effect of measurement noise and electrode density on the spatial resolution of cortical potential distribution with different resistivity values for the skull. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 1851-8 | 5 | 44 |
| 218 | The influence of age and skull conductivity on surface and subdermal bipolar EEG leads. <i>Computational Intelligence and Neuroscience</i> , 2010 , 2010, 397272 | 3 | 43 |
| 217 | Human induced pluripotent stem cell-derived versus adult cardiomyocytes: an in silico electrophysiological study on effects of ionic current block. <i>British Journal of Pharmacology</i> , 2015 , 172, 5147-60 | 8.6 | 42 |
| 216 | Mechanically Biomimetic Gelatin-Gellan Gum Hydrogels for 3D Culture of Beating Human Cardiomyocytes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 20589-20602 | 9.5 | 39 |
| 215 | Non-Binary Coding for Texture Descriptors in Sub-Cellular and Stem Cell Image Classification. <i>Current Bioinformatics</i> , 2013 , 8, 208-219 | 4.7 | 39 |
| 214 | Phenotypic variability in LQT3 human induced pluripotent stem cell-derived cardiomyocytes and their response to antiarrhythmic pharmacologic therapy: An in silico approach. <i>Heart Rhythm</i> , 2017 , 14, 1704-1712 | 6.7 | 37 |
| 213 | Rapidly responsive silk fibroin hydrogels as an artificial matrix for the programmed tumor cells death. <i>PLoS ONE</i> , 2018 , 13, e0194441 | 3.7 | 37 |
| 212 | Human Neural Tissues from Neural Stem Cells Using Conductive Biogel and Printed Polymer Microelectrode Arrays for 3D Electrical Stimulation. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1900425 | 10.1 | 35 |
| 211 | Automatic Optimization of an Model of Human iPSC Derived Cardiomyocytes Recapitulating Calcium Handling Abnormalities. <i>Frontiers in Physiology</i> , 2018 , 9, 709 | 4.6 | 35 |
| 210 | Best electrode locations for a small bipolar ECG device: signal strength analysis of clinical data. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 331-6 | 4.7 | 35 |
| 209 | Design and implementation of a portable long-term physiological signal recorder. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2010 , 14, 718-25 | | 34 |
| 208 | Direct laser writing and geometrical analysis of scaffolds with designed pore architecture for three-dimensional cell culturing. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 115016 | 2 | 32 |
| 207 | Aquaporin expression and function in human pluripotent stem cell-derived retinal pigmented epithelial cells 2013 , 54, 3510-9 | | 31 |
| 206 | Effect of electrode density and measurement noise on the spatial resolution of cortical potential distribution. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 1547-54 | 5 | 30 |

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|-----|--|-----|----|
| 205 | Methods for in vitro functional analysis of iPSC derived cardiomyocytes - Special focus on analyzing the mechanical beating behavior. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016 , 1863, 1864-72 | 4.9 | 29 |
| 204 | Investigating the possible effect of electrode support structure on motion artifact in wearable bioelectric signal monitoring. <i>BioMedical Engineering OnLine</i> , 2015 , 14, 44 | 4.1 | 29 |
| 203 | Comparison of chondroitin sulfate and hyaluronic Acid doped conductive polypyrrole films for adipose stem cells. <i>Annals of Biomedical Engineering</i> , 2014 , 42, 1889-900 | 4.7 | 27 |
| 202 | Novel electrode configuration for highly linear impedance pneumography. <i>Biomedizinische Technik</i> , 2013 , 58, 35-8 | 1.3 | 27 |
| 201 | A software implementation for detailed volume conductor modelling in electrophysiology using finite difference method. <i>Computer Methods and Programs in Biomedicine</i> , 1999 , 58, 191-203 | 6.9 | 26 |
| 200 | Distinct electrophysiological and mechanical beating phenotypes of long QT syndrome type 1-specific cardiomyocytes carrying different mutations. <i>IJC Heart and Vasculature</i> , 2015 , 8, 19-31 | 2.4 | 25 |
| 199 | Characterization of dynamical systems under noise using recurrence networks: Application to simulated and EEG data. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014 , 378, 3464-3474 | 2.3 | 25 |
| 198 | Wireless and inductively powered implant for measuring electrocardiogram. <i>Medical and Biological Engineering and Computing</i> , 2007 , 45, 1163-74 | 3.1 | 25 |
| 197 | Crystallization and sintering of borosilicate bioactive glasses for application in tissue engineering. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 4514-4525 | 7.3 | 24 |
| 196 | Evaluation of Optogenetic Electrophysiology Tools in Human Stem Cell-Derived Cardiomyocytes. <i>Frontiers in Physiology</i> , 2017 , 8, 884 | 4.6 | 24 |
| 195 | Cardiomyocyte MEA data analysis (CardioMDA)--a novel field potential data analysis software for pluripotent stem cell derived cardiomyocytes. <i>PLoS ONE</i> , 2013 , 8, e73637 | 3.7 | 24 |
| 194 | Usability evaluation of a web-based patient information system for individuals with severe mental health problems. <i>Journal of Advanced Nursing</i> , 2010 , 66, 2701-10 | 3.1 | 23 |
| 193 | Quantifying the effect of electric current on cell adhesion studied by single-cell force spectroscopy. <i>Biointerphases</i> , 2016 , 11, 011004 | 1.8 | 23 |
| 192 | Simultaneous Measurement of Contraction and Calcium Transients in Stem Cell Derived Cardiomyocytes. <i>Annals of Biomedical Engineering</i> , 2018 , 46, 148-158 | 4.7 | 22 |
| 191 | Computer vision for virus image classification. <i>Biosystems Engineering</i> , 2015 , 138, 11-22 | 4.8 | 22 |
| 190 | Optical projection tomography as a tool for 3D imaging of hydrogels. <i>Biomedical Optics Express</i> , 2014 , 5, 3443-9 | 3.5 | 21 |
| 189 | Bone loss patterns in cortical, subcortical, and trabecular compartments during simulated microgravity. <i>Journal of Applied Physiology</i> , 2014 , 117, 80-8 | 3.7 | 20 |
| 188 | A method for suppressing cardiogenic oscillations in impedance pneumography. <i>Physiological Measurement</i> , 2011 , 32, 337-45 | 2.9 | 20 |

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| 187 | Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum. <i>Langmuir</i> , 2016 , 32, 5173-82 | 4 | 20 |
| 186 | Impedance spectroscopy of changes in skin-electrode impedance induced by motion. <i>BioMedical Engineering OnLine</i> , 2014 , 13, 149 | 4.1 | 19 |
| 185 | The relationship between loading history and proximal femoral diaphysis cross-sectional geometry. <i>American Journal of Human Biology</i> , 2017 , 29, e22965 | 2.7 | 18 |
| 184 | Wireless head cap for EOG and facial EMG measurements. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2005 , 2005, 5865-8 | | 18 |
| 183 | Validation of a detailed computer model for the electric fields in the brain. <i>Journal of Medical Engineering and Technology</i> , 1995 , 19, 84-7 | 1.8 | 18 |
| 182 | Bioactive glass ions induce efficient osteogenic differentiation of human adipose stem cells encapsulated in gellan gum and collagen type I hydrogels. <i>Materials Science and Engineering C</i> , 2019 , 99, 905-918 | 8.3 | 17 |
| 181 | Intercellular Ca(2+) wave propagation in human retinal pigment epithelium cells induced by mechanical stimulation. <i>Experimental Eye Research</i> , 2013 , 108, 129-39 | 3.7 | 17 |
| 180 | Dynamics of intracranial electroencephalographic recordings from epilepsy patients using univariate and bivariate recurrence networks. <i>Physical Review E</i> , 2015 , 91, 022927 | 2.4 | 17 |
| 179 | Modeling and Experimental Characterization of Pressure Drop in Gravity-Driven Microfluidic Systems. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2015 , 137, | 2.1 | 17 |
| 178 | X-ray microtomographic confirmation of the reliability of CBCT in identifying the scalar location of cochlear implant electrode after round window insertion. <i>Hearing Research</i> , 2015 , 326, 59-65 | 3.9 | 16 |
| 177 | All-Optical Electrophysiology Refines Populations of In Silico Human iPSC-CMs for Drug Evaluation. <i>Biophysical Journal</i> , 2020 , 118, 2596-2611 | 2.9 | 16 |
| 176 | Accuracy of two dipolar inverse algorithms applying reciprocity for forward calculation. <i>Journal of Biomedical Informatics</i> , 2000 , 33, 172-85 | | 16 |
| 175 | Structural dynamics of tight junctions modulate the properties of the epithelial barrier. <i>PLoS ONE</i> , 2019 , 14, e0214876 | 3.7 | 15 |
| 174 | Real-Time Bioimpedance-Based Biopsy Needle Can Identify Tissue Type with High Spatial Accuracy. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 836-851 | 4.7 | 15 |
| 173 | Viability of Mouse Retinal Explant Cultures Assessed by Preservation of Functionality and Morphology 2019 , 60, 1914-1927 | | 14 |
| 172 | Functional Outcome of Human Adipose Stem Cell Injections in Rat Anal Sphincter Acute Injury Model. <i>Stem Cells Translational Medicine</i> , 2018 , 7, 295-304 | 6.9 | 14 |
| 171 | Electric impedance of human embryonic stem cell-derived retinal pigment epithelium. <i>Medical and Biological Engineering and Computing</i> , 2012 , 50, 107-16 | 3.1 | 14 |
| 170 | Effects of chitosan and bioactive glass modifications of knitted and rolled polylactide-based 96/4 L/D scaffolds on chondrogenic differentiation of adipose stem cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 55-65 | 4.4 | 14 |

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| 169 | Ballistocardiographic studies with acceleration and electromechanical film sensors. <i>Medical Engineering and Physics</i> , 2009 , 31, 1154-65 | 2.4 | 14 |
| 168 | Lead field theoretical approach in bioimpedance measurements: towards more controlled measurement sensitivity. <i>Annals of the New York Academy of Sciences</i> , 1999 , 873, 135-42 | 6.5 | 14 |
| 167 | Exercise loading history and femoral neck strength in a sideways fall: A three-dimensional finite element modeling study. <i>Bone</i> , 2016 , 92, 9-17 | 4.7 | 14 |
| 166 | Knitted 3D Scaffolds of Polybutylene Succinate Support Human Mesenchymal Stem Cell Growth and Osteogenesis. <i>Stem Cells International</i> , 2018 , 2018, 5928935 | 5 | 14 |
| 165 | Signal analysis and classification methods for the calcium transient data of stem cell-derived cardiomyocytes. <i>Computers in Biology and Medicine</i> , 2015 , 61, 1-7 | 7 | 13 |
| 164 | In Vitro Degradation of Borosilicate Bioactive Glass and Poly(l-lactide-co- ϵ -caprolactone) Composite Scaffolds. <i>Materials</i> , 2017 , 10, | 3.5 | 13 |
| 163 | A motion artifact generation and assessment system for the rapid testing of surface biopotential electrodes. <i>Physiological Measurement</i> , 2015 , 36, 1-25 | 2.9 | 13 |
| 162 | Femoral neck cross-sectional geometry and exercise loading. <i>Clinical Physiology and Functional Imaging</i> , 2013 , 33, 258-66 | 2.4 | 13 |
| 161 | Anatomical sector analysis of load-bearing tibial bone structure during 90-day bed rest and 1-year recovery. <i>Clinical Physiology and Functional Imaging</i> , 2011 , 31, 249-57 | 2.4 | 13 |
| 160 | Detailed model of the thorax as a volume conductor based on the visible human man data. <i>Journal of Medical Engineering and Technology</i> , 1998 , 22, 126-33 | 1.8 | 13 |
| 159 | Spectral Entropy Based Neuronal Network Synchronization Analysis Based on Microelectrode Array Measurements. <i>Frontiers in Computational Neuroscience</i> , 2016 , 10, 112 | 3.5 | 13 |
| 158 | The combination of electric current and copper promotes neuronal differentiation of adipose-derived stem cells. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 1014-23 | 4.7 | 12 |
| 157 | New method for analysing sensitivity distributions of electroencephalography measurements. <i>Medical and Biological Engineering and Computing</i> , 2008 , 46, 101-8 | 3.1 | 12 |
| 156 | Texture Descriptors Ensembles Enable Image-Based Classification of Maturation of Human Stem Cell-Derived Retinal Pigmented Epithelium. <i>PLoS ONE</i> , 2016 , 11, e0149399 | 3.7 | 12 |
| 155 | Inner ear barriers to nanomedicine-augmented drug delivery and imaging. <i>Journal of Otology</i> , 2016 , 11, 165-177 | 1.9 | 12 |
| 154 | Large-Scale Simulation of the Phenotypical Variability Induced by Loss-of-Function Long QT Mutations in Human Induced Pluripotent Stem Cell Cardiomyocytes. <i>International Journal of Molecular Sciences</i> , 2018 , 19, | 6.3 | 12 |
| 153 | 3D Scaffolds of Polycaprolactone/Copper-Doped Bioactive Glass: Architecture Engineering with Additive Manufacturing and Cellular Assessments in a Coculture of Bone Marrow Stem Cells and Endothelial Cells. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 4496-4510 | 5.5 | 11 |
| 152 | Averaging in vitro cardiac field potential recordings obtained with microelectrode arrays. <i>Computer Methods and Programs in Biomedicine</i> , 2011 , 104, 199-205 | 6.9 | 11 |

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| 151 | Impedance spectroscopy in monitoring the maturation of stem cell-derived retinal pigment epithelium. <i>Annals of Biomedical Engineering</i> , 2011 , 39, 3055-69 | 4.7 | 11 |
| 150 | Effects of tissue resistivities on electroencephalogram sensitivity distribution. <i>Medical and Biological Engineering and Computing</i> , 1999 , 37, 555-9 | 3.1 | 11 |
| 149 | Analysis of nonlinear dynamics of healthy and epileptic EEG signals using recurrence based complex network approach 2013 , | | 10 |
| 148 | Network-Wide Adaptive Burst Detection Depicts Neuronal Activity with Improved Accuracy. <i>Frontiers in Computational Neuroscience</i> , 2017 , 11, 40 | 3.5 | 10 |
| 147 | Characterization of microstructures using contour tree connectivity for fluid flow analysis. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20131042 | 4.1 | 10 |
| 146 | Mobile ECG measurement and analysis system using mobile phone as the base station 2008 , | | 10 |
| 145 | Inverse electrocardiographic transformations: dependence on the number of epicardial regions and body surface data points. <i>Mathematical Biosciences</i> , 1994 , 120, 165-87 | 3.9 | 10 |
| 144 | Measuring Respirational Parameters with a Wearable Bioimpedance Device 2007 , 663-666 | | 10 |
| 143 | Functional Voltage-Gated Calcium Channels Are Present in Human Embryonic Stem Cell-Derived Retinal Pigment Epithelium. <i>Stem Cells Translational Medicine</i> , 2019 , 8, 179-193 | 6.9 | 10 |
| 142 | hiPSC-Derived Cardiomyocyte Model of LQT2 Syndrome Derived from Asymptomatic and Symptomatic Mutation Carriers Reproduces Clinical Differences in Aggregates but Not in Single Cells. <i>Cells</i> , 2020 , 9, | 7.9 | 9 |
| 141 | A Portable Microscale Cell Culture System with Indirect Temperature Control. <i>SLAS Technology</i> , 2018 , 23, 566-579 | 3 | 9 |
| 140 | Signatures of chaotic and stochastic dynamics uncovered with $\bar{\mu}$ -recurrence networks. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015 , 471, 20150349 | 2.4 | 9 |
| 139 | Study on the spatial resolution of EEG--effect of electrode density and measurement noise. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4409-12 | | 9 |
| 138 | Joint analysis of extracellular spike waveforms and neuronal network bursts. <i>Journal of Neuroscience Methods</i> , 2016 , 259, 143-155 | 3 | 8 |
| 137 | Impact loading history modulates hip fracture load and location: A finite element simulation study of the proximal femur in female athletes. <i>Journal of Biomechanics</i> , 2018 , 76, 136-143 | 2.9 | 8 |
| 136 | μ T based assessment of mechanical deformation of designed PTMC scaffolds. <i>Clinical Hemorheology and Microcirculation</i> , 2015 , 60, 99-108 | 2.5 | 8 |
| 135 | Computational Model of Ca ²⁺ Wave Propagation in Human Retinal Pigment Epithelial ARPE-19 Cells. <i>PLoS ONE</i> , 2015 , 10, e0128434 | 3.7 | 8 |
| 134 | Utilization of wireless sensor network for health monitoring in home environment 2009 , | | 8 |

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| 133 | Atomic layer deposited iridium oxide thin film as microelectrode coating in stem cell applications. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 041501 | 2.9 | 8 |
| 132 | Assessment of Breathing Parameters during Running with a Wearable Bioimpedance Device. <i>IFMBE Proceedings</i> , 2009 , 1088-1091 | 0.2 | 8 |
| 131 | Enhanced bone structural analysis through pQCT image preprocessing. <i>Medical Engineering and Physics</i> , 2010 , 32, 398-406 | 2.4 | 8 |
| 130 | Segmental composition of whole-body impedance cardiogram estimated by computer simulations and clinical experiments. <i>Clinical Physiology</i> , 2000 , 20, 106-13 | | 8 |
| 129 | Simulation of the Effects of Extracellular Calcium Changes Leads to a Novel Computational Model of Human Ventricular Action Potential With a Revised Calcium Handling. <i>Frontiers in Physiology</i> , 2020 , 11, 314 | 4.6 | 7 |
| 128 | Polypyrrole coating on poly-(lactide/glycolide)-β-tricalcium phosphate screws enhances new bone formation in rabbits. <i>Biomedical Materials (Bristol)</i> , 2015 , 10, 065016 | 3.5 | 7 |
| 127 | Computer model analysis of the relationship of ST-segment and ST-segment/heart rate slope response to the constituents of the ischemic injury source. <i>Journal of Electrocardiology</i> , 1997 , 30, 161-74 ^{1.4} | | 7 |
| 126 | Application of computer modelling and lead field theory in developing multiple aimed impedance cardiography measurements. <i>Journal of Medical Engineering and Technology</i> , 1999 , 23, 169-77 | 1.8 | 7 |
| 125 | Porous poly-l-lactide-co-e-caprolactone scaffold: a novel biomaterial for vaginal tissue engineering. <i>Royal Society Open Science</i> , 2018 , 5, 180811 | 3.3 | 7 |
| 124 | Semi-automatic Method for Ca Imaging Data Analysis of Maturing Human Embryonic Stem Cells-Derived Retinal Pigment Epithelium. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 3408-3420 | 4.7 | 6 |
| 123 | Prediction of passive drug permeability across the blood-retinal barrier. <i>Pharmaceutical Research</i> , 2014 , 31, 2297-311 | 4.5 | 6 |
| 122 | Multilead measurement system for the time-domain analysis of bioimpedance magnitude. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 2273-80 | 5 | 6 |
| 121 | All Titanium Microelectrode Array for Field Potential Measurements from Neurons and Cardiomyocytes – Feasibility Study. <i>Micromachines</i> , 2011 , 2, 394-409 | 3.3 | 6 |
| 120 | Value of leads V4R and CM5 in the detection of coronary artery disease during exercise electrocardiographic test. <i>Clinical Physiology and Functional Imaging</i> , 2010 , 30, 308-12 | 2.4 | 6 |
| 119 | 2D texture based classification, segmentation and 3D orientation estimation of tissues using DT-CWT feature extraction methods. <i>Data and Knowledge Engineering</i> , 2009 , 68, 1383-1397 | 1.5 | 6 |
| 118 | Setup and dosimetry for exposing anaesthetised pigs in vivo to 900 MHz GSM mobile phone fields. <i>Bioelectromagnetics</i> , 2008 , 29, 363-70 | 1.6 | 6 |
| 117 | Wireless Measurement System for Bioimpedance and ECG 2007 , 248-251 | | 6 |
| 116 | Automatic classification of IgA endomysial antibody test for celiac disease: a new method deploying machine learning. <i>Scientific Reports</i> , 2019 , 9, 9217 | 4.9 | 5 |

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| 115 | Heart rate variability evaluation of Emfit sleep mattress breathing categories in NREM sleep. <i>Clinical Neurophysiology</i> , 2015 , 126, 967-74 | 4.3 | 5 |
| 114 | Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20200102 | 4.1 | 5 |
| 113 | Rotational electrical impedance tomography using electrodes with limited surface coverage provides window for multimodal sensing. <i>Measurement Science and Technology</i> , 2018 , 29, 025401 | 2 | 5 |
| 112 | Threshold-free automatic detection of cortical bone geometry by peripheral quantitative computed tomography. <i>Journal of Clinical Densitometry</i> , 2012 , 15, 413-421 | 3.5 | 5 |
| 111 | Arterial tension time reflects subclinical atherosclerosis, arterial stiffness and stroke volume. <i>Clinical Physiology and Functional Imaging</i> , 2011 , 31, 464-71 | 2.4 | 5 |
| 110 | Correlation between signal-to-noise ratios and region of interest sensitivity ratios of bipolar EEG measurements. <i>Medical and Biological Engineering and Computing</i> , 2008 , 46, 381-9 | 3.1 | 5 |
| 109 | Finite difference and lead field methods in designing implantable ECG monitor. <i>Medical and Biological Engineering and Computing</i> , 2006 , 44, 857-64 | 3.1 | 5 |
| 108 | Optical Projection Tomography Imaging of Single Cells in 3D Gellan Gum Hydrogel. <i>IFMBE Proceedings</i> , 2018 , 996-999 | 0.2 | 5 |
| 107 | X-ray microtomography is a novel method for accurate evaluation of small-bowel mucosal morphology and surface area. <i>Scientific Reports</i> , 2020 , 10, 13164 | 4.9 | 5 |
| 106 | A mathematical model and iterative inversion for fluorescent optical projection tomography. <i>Physics in Medicine and Biology</i> , 2019 , 64, 045017 | 3.8 | 5 |
| 105 | A new algorithm to improve assessment of cortical bone geometry in pQCT. <i>Bone</i> , 2015 , 81, 721-730 | 4.7 | 4 |
| 104 | Simulation of developing human neuronal cell networks. <i>BioMedical Engineering OnLine</i> , 2016 , 15, 105 | 4.1 | 4 |
| 103 | Gaussian Light Model in Brightfield Optical Projection Tomography. <i>Scientific Reports</i> , 2019 , 9, 13934 | 4.9 | 4 |
| 102 | Postoperative sternal stability assessed by vibration: a preliminary study. <i>Annals of Thoracic Surgery</i> , 2012 , 94, 260-4 | 2.7 | 4 |
| 101 | Quantification and automatized adaptive detection of in vivo and in vitro neuronal bursts based on signal complexity. <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, 4729-32 | 0.9 | 4 |
| 100 | New precordial bipolar electrocardiographic leads for detecting left ventricular hypertrophy. <i>Journal of Electrocardiology</i> , 2010 , 43, 654-9 | 1.4 | 4 |
| 99 | Electrode position optimization for facial EMG measurements for human-computer interface. <i>Methods of Information in Medicine</i> , 2008 , 47, 192-7 | 1.5 | 4 |
| 98 | A FDM anisotropic formulation for EEG simulation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 1121-5 | | 4 |

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| 97 | Do bone geometric properties of the proximal femoral diaphysis reflect loading history, muscle properties, or body dimensions?. <i>American Journal of Human Biology</i> , 2019 , 31, e23246 | 2.7 | 3 |
| 96 | Ricci-flow based conformal mapping of the proximal femur to identify exercise loading effects. <i>Scientific Reports</i> , 2018 , 8, 4823 | 4.9 | 3 |
| 95 | Histogram-based classification of iPSC colony images using machine learning methods 2014 , | | 3 |
| 94 | Investigating local spatially-enhanced structural and textural descriptors for classification of iPSC colony images. <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, 3361-5 | 0.9 | 3 |
| 93 | Binary image representation by contour trees 2012 , | | 3 |
| 92 | Contour tree connectivity of binary images from algebraic graph theory 2013 , | | 3 |
| 91 | Determination of bioceramic filler distribution and porosity of self-reinforced bioabsorbable composites using micro-computed tomography. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011 , 42, 534-542 | 8.4 | 3 |
| 90 | 2011 , | | 3 |
| 89 | Analysing specificity of a bipolar EEG measurement. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 1102-5 | | 3 |
| 88 | Estimation of ECG signal of closely separated bipolar electrodes using thorax models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 801-4 | | 3 |
| 87 | Murine cerebral organoids develop network of functional neurons and hippocampal brain region identity.. <i>IScience</i> , 2021 , 24, 103438 | 6.1 | 3 |
| 86 | Characterisation and in vitro and in vivo evaluation of supercritical-CO ₂ -foamed β TCP/PLCL composites for bone applications. <i>European Cells and Materials</i> , 2019 , 38, 35-50 | 4.3 | 3 |
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