Jari A Hyttinen

List of Publications by Year in Descending Order

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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	Effect of fall direction on the lower hip fracture risk in athletes with different loading histories: A finite element modeling study in multiple sideways fall configurations.. *Bone*, **2022**, 116351	4.7	
239	Optical Projection Tomography for Particle Counting and Morphology Analysis. *IFMBE Proceedings*, **2021**, 944-951	0.2	1
238	Hyperparameter Algorithms in Electrical Impedance Tomography for Rotational Data. *IFMBE Proceedings*, **2021**, 631-643	0.2	1
237	A mathematical model of hiPSC cardiomyocytes electromechanics. *Physiological Reports*, **2021**, 9, e15124	2.6	1
236	Murine cerebral organoids develop network of functional neurons and hippocampal brain region identity.. *IScience*, **2021**, 24, 103438	6.1	3
235	Optical projection tomography as a quantitative tool for analysis of cell morphology and density in 3D hydrogels. *Scientific Reports*, **2021**, 11, 6538	4.9	2
234	Causal coupling inference from multivariate time series based on ordinal partition transition networks. *Nonlinear Dynamics*, **2021**, 105, 555-578	5	0
233	Multifrequency electrical impedance tomography in biological applications: A multimodal perspective **2021**, 157-189		1
232	Iron Transporter Protein Expressions in Children with Celiac Disease. *Nutrients*, **2021**, 13,	6.7	3
231	Retrieval of the conductivity spectrum of tissueswith novel multimodal tomography. *Physics in Medicine and Biology*, **2021**, 66,	3.8	1
230	hiPSC-Derived Cardiomyocyte Model of LQT2 Syndrome Derived from Asymptomatic and Symptomatic Mutation Carriers Reproduces Clinical Differences in Aggregates but Not in Single Cells. *Cells*, **2020**, 9,	7.9	9
229	All-Optical Electrophysiology Refines Populations of In Silico Human iPSC-CMs for Drug Evaluation. *Biophysical Journal*, **2020**, 118, 2596-2611	2.9	16
228	Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools. *Journal of the Royal Society Interface*, **2020**, 17, 20200102	4.1	5
227	Simulation of the Effects of Extracellular Calcium Changes Leads to a Novel Computational Model of Human Ventricular Action Potential With a Revised Calcium Handling. *Frontiers in Physiology*, **2020**, 11, 314	4.6	7
226	Enhancing CT 3D Images by Independent Component Analysis of Projection Images. *IFMBE Proceedings*, **2020**, 381-389	0.2	
225	Influence of Astrocytic Gap Junction Coupling on in Silico Neuronal Network Activity. *IFMBE Proceedings*, **2020**, 480-487	0.2	1
224	Mechanical impact stimulation platform tailored for high-resolution light microscopy. *Health and Technology*, **2020**, 10, 87-99	2.1	1

223	A device for measuring sternal bone connectivity using vibration analysis techniques. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2020**, 234, 81-90	1.7	1
222	A tube-source X-ray microtomography approach for quantitative 3D microscopy of optically challenging cell-cultured samples. *Communications Biology*, **2020**, 3, 548	6.7	3
221	Toward Closed-Loop Electrical Stimulation of Neuronal Systems: A Review. *Bioelectricity*, **2020**, 2, 328-347		2
220	X-ray microtomography is a novel method for accurate evaluation of small-bowel mucosal morphology and surface area. *Scientific Reports*, **2020**, 10, 13164	4.9	5
219	Miniaturized Stimulator for Imaging of Live Cell Responses to High Frequency Mechanical Vibration. *IFMBE Proceedings*, **2020**, 21-27	0.2	2
218	Automatic classification of IgA endomysial antibody test for celiac disease: a new method deploying machine learning. *Scientific Reports*, **2019**, 9, 9217	4.9	5
217	Viability of Mouse Retinal Explant Cultures Assessed by Preservation of Functionality and Morphology **2019**, 60, 1914-1927		14
216	Human Neural Tissues from Neural Stem Cells Using Conductive Biogel and Printed Polymer Microelectrode Arrays for 3D Electrical Stimulation. *Advanced Healthcare Materials*, **2019**, 8, e1900425	10.1	35
215	Mechanically Biomimetic Gelatin-Gellan Gum Hydrogels for 3D Culture of Beating Human Cardiomyocytes. *ACS Applied Materials & Interfaces*, **2019**, 11, 20589-20602	9.5	39
214	Do bone geometric properties of the proximal femoral diaphysis reflect loading history, muscle properties, or body dimensions?. *American Journal of Human Biology*, **2019**, 31, e23246	2.7	3
213	Structural dynamics of tight junctions modulate the properties of the epithelial barrier. *PLoS ONE*, **2019**, 14, e0214876	3.7	15
212	Vibration transmittance measures sternotomy stability - a preliminary study in human cadavers. *Journal of Cardiothoracic Surgery*, **2019**, 14, 2	1.6	2
211	Bioactive glass ions induce efficient osteogenic differentiation of human adipose stem cells encapsulated in gellan gum and collagen type I hydrogels. *Materials Science and Engineering C*, **2019**, 99, 905-918	8.3	17
210	Finite Element Mapping for Efficient Image Reconstruction in Rotational Electrical Impedance Tomography. *IFMBE Proceedings*, **2019**, 901-904	0.2	2
209	Neural Tissue Engineering: Human Neural Tissues from Neural Stem Cells Using Conductive Biogel and Printed Polymer Microelectrode Arrays for 3D Electrical Stimulation (Adv. Healthcare Mater. 15/2019). *Advanced Healthcare Materials*, **2019**, 8, 1970062	10.1	1
208	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. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4496-4510	5.5	11
207	Gaussian Light Model in Brightfield Optical Projection Tomography. *Scientific Reports*, **2019**, 9, 13934	4.9	4
206	Characterisation and in vitro and in vivo evaluation of supercritical-CO2-foamed βTCP/PLCL composites for bone applications. *European Cells and Materials*, **2019**, 38, 35-50	4.3	3

205	μCT Based Characterization of Biomaterial Scaffold Microstructure Under Compression. *IFMBE Proceedings*, **2019**, 165-169	0.2	
204	Functional Voltage-Gated Calcium Channels Are Present in Human Embryonic Stem Cell-Derived Retinal Pigment Epithelium. *Stem Cells Translational Medicine*, **2019**, 8, 179-193	6.9	10
203	Augmenting Soft Tissue Contrast Using Edge-Enhancing Phase-Imaging Techniques in X-Ray Microtomography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 4867-4870	0.9	1
202	Real-Time Bioimpedance-Based Biopsy Needle Can Identify Tissue Type with High Spatial Accuracy. *Annals of Biomedical Engineering*, **2019**, 47, 836-851	4.7	15
201	A mathematical model and iterative inversion for fluorescent optical projection tomography. *Physics in Medicine and Biology*, **2019**, 64, 045017	3.8	5
200	Rotational electrical impedance tomography using electrodes with limited surface coverage provides window for multimodal sensing. *Measurement Science and Technology*, **2018**, 29, 025401	2	5
199	Ricci-flow based conformal mapping of the proximal femur to identify exercise loading effects. *Scientific Reports*, **2018**, 8, 4823	4.9	3
198	Functional Outcome of Human Adipose Stem Cell Injections in Rat Anal Sphincter Acute Injury Model. *Stem Cells Translational Medicine*, **2018**, 7, 295-304	6.9	14
197	Polypyrrole-coated electrodes show thickness-dependent stability in different conditions during 42-day follow-up in vitro. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2018**, 106, 2202-2213	3.5	1
196	Simultaneous Measurement of Contraction and Calcium Transients in Stem Cell Derived Cardiomyocytes. *Annals of Biomedical Engineering*, **2018**, 46, 148-158	4.7	22
195	Wound healing of human embryonic stem cell-derived retinal pigment epithelial cells is affected by maturation stage. *BioMedical Engineering OnLine*, **2018**, 17, 102	4.1	1
194	Automatic Optimization of an Model of Human iPSC Derived Cardiomyocytes Recapitulating Calcium Handling Abnormalities. *Frontiers in Physiology*, **2018**, 9, 709	4.6	35
193	A Portable Microscale Cell Culture System with Indirect Temperature Control. *SLAS Technology*, **2018**, 23, 566-579	3	9
192	Impact loading history modulates hip fracture load and location: A finite element simulation study of the proximal femur in female athletes. *Journal of Biomechanics*, **2018**, 76, 136-143	2.9	8
191	Optical Projection Tomography Imaging of Single Cells in 3D Gellan Gum Hydrogel. *IFMBE Proceedings*, **2018**, 996-999	0.2	5
190	Detection and Assessment of Sleep-Disordered Breathing with Emfit Mattress. *IFMBE Proceedings*, **2018**, 173-176	0.2	1
189	Computational model for multifocal imaging in optical projection tomography and numerical analysis of all-in-focus fusion in tomographic image reconstruction. *IFMBE Proceedings*, **2018**, 282-285	0.2	1
188	Texture-property relations of bioamine crosslinked gellan gum hydrogels. *IFMBE Proceedings*, **2018**, 189-192	0.2	

187	Characterization of Chloride Channels in Human Embryonic Stem Cell Derived Retinal Pigment Epithelium. *IFMBE Proceedings*, **2018**, 454-457	0.2	0
186	Sensitivity Distribution of Electrical Impedance Epithelial Measurement Systems. *IFMBE Proceedings*, **2018**, 623-626	0.2	
185	In Silico Populations Optimized on Optogenetic Recordings Predict Drug Effects in Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes **2018**,		3
184	Large-Scale Simulation of the Phenotypical Variability Induced by Loss-of-Function Long QT Mutations in Human Induced Pluripotent Stem Cell Cardiomyocytes. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	12
183	Porous poly-l-lactide-co-e-caprolactone scaffold: a novel biomaterial for vaginal tissue engineering. *Royal Society Open Science*, **2018**, 5, 180811	3.3	7
182	Novel osteoconductive tricalcium phosphate/poly(L-lactide-co-e-caprolactone) scaffold for bone regeneration: a study in a rabbit calvarial defect. *Journal of Materials Science: Materials in Medicine*, **2018**, 29, 156	4.5	3
181	Rapidly responsive silk fibroin hydrogels as an artificial matrix for the programmed tumor cells death. *PLoS ONE*, **2018**, 13, e0194441	3.7	37
180	Knitted 3D Scaffolds of Polybutylene Succinate Support Human Mesenchymal Stem Cell Growth and Osteogenesis. *Stem Cells International*, **2018**, 2018, 5928935	5	14
179	The relationship between loading history and proximal femoral diaphysis cross-sectional geometry. *American Journal of Human Biology*, **2017**, 29, e22965	2.7	18
178	Crystallization and sintering of borosilicate bioactive glasses for application in tissue engineering. *Journal of Materials Chemistry B*, **2017**, 5, 4514-4525	7.3	24
177	Surface curvature in triply-periodic minimal surface architectures as a distinct design parameter in preparing advanced tissue engineering scaffolds. *Biofabrication*, **2017**, 9, 025001	10.5	75
176	Phenotypic variability in LQT3 human induced pluripotent stem cell-derived cardiomyocytes and their response to antiarrhythmic pharmacologic therapy: An in silico approach. *Heart Rhythm*, **2017**, 14, 1704-1712	6.7	37
175	Evaluation of Optogenetic Electrophysiology Tools in Human Stem Cell-Derived Cardiomyocytes. *Frontiers in Physiology*, **2017**, 8, 884	4.6	24
174	In Vitro Degradation of Borosilicate Bioactive Glass and Poly(l-lactide-co- -caprolactone) Composite Scaffolds. *Materials*, **2017**, 10,	3.5	13
173	Network-Wide Adaptive Burst Detection Depicts Neuronal Activity with Improved Accuracy. *Frontiers in Computational Neuroscience*, **2017**, 11, 40	3.5	10
172	Computational model for simulating multifocal imaging in optical projection tomography **2017**,		1
171	Simulation of developing human neuronal cell networks. *BioMedical Engineering OnLine*, **2016**, 15, 105	4.1	4
170	Semi-automatic Method for Ca Imaging Data Analysis of Maturing Human Embryonic Stem Cells-Derived Retinal Pigment Epithelium. *Annals of Biomedical Engineering*, **2016**, 44, 3408-3420	4.7	6

169	Joint analysis of extracellular spike waveforms and neuronal network bursts. *Journal of Neuroscience Methods*, **2016**, 259, 143-155	3	8
168	Methods for in vitro functional analysis of iPSC derived cardiomyocytes - Special focus on analyzing the mechanical beating behavior. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2016**, 1863, 1864-72	4.9	29
167	Spectral Entropy Based Neuronal Network Synchronization Analysis Based on Microelectrode Array Measurements. *Frontiers in Computational Neuroscience*, **2016**, 10, 112	3.5	13
166	Texture Descriptors Ensembles Enable Image-Based Classification of Maturation of Human Stem Cell-Derived Retinal Pigmented Epithelium. *PLoS ONE*, **2016**, 11, e0149399	3.7	12
165	Inner ear barriers to nanomedicine-augmented drug delivery and imaging. *Journal of Otology*, **2016**, 11, 165-177	1.9	12
164	Quantifying the effect of electric current on cell adhesion studied by single-cell force spectroscopy. *Biointerphases*, **2016**, 11, 011004	1.8	23
163	X-ray Microtomography of Collagen and Polylactide Samples in Liquids. *IFMBE Proceedings*, **2016**, 420-424	4.2	1
162	Ensembles of dense and dense sampling descriptors for the HEp-2 cells classification problem. *Pattern Recognition Letters*, **2016**, 82, 28-35	4.7	3
161	Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum. *Langmuir*, **2016**, 32, 5173-82	4	20
160	Exercise loading history and femoral neck strength in a sideways fall: A three-dimensional finite element modeling study. *Bone*, **2016**, 92, 9-17	4.7	14
159	Micro CT visualization of silver nanoparticles in the middle and inner ear of rat and transportation pathway after transtympanic injection. *Journal of Nanobiotechnology*, **2015**, 13, 5	9.4	48
158	Distinct electrophysiological and mechanical beating phenotypes of long QT syndrome type 1-specific cardiomyocytes carrying different mutations. *IJC Heart and Vasculature*, **2015**, 8, 19-31	2.4	25
157	Signal analysis and classification methods for the calcium transient data of stem cell-derived cardiomyocytes. *Computers in Biology and Medicine*, **2015**, 61, 1-7	7	13
156	X-ray microtomographic confirmation of the reliability of CBCT in identifying the scalar location of cochlear implant electrode after round window insertion. *Hearing Research*, **2015**, 326, 59-65	3.9	16
155	Heart rate variability evaluation of Emfit sleep mattress breathing categories in NREM sleep. *Clinical Neurophysiology*, **2015**, 126, 967-74	4.3	5
154	A new algorithm to improve assessment of cortical bone geometry in pQCT. *Bone*, **2015**, 81, 721-730	4.7	4
153	The combination of electric current and copper promotes neuronal differentiation of adipose-derived stem cells. *Annals of Biomedical Engineering*, **2015**, 43, 1014-23	4.7	12
152	Recurrence network analysis of multiple local field potential bands from the orofacial portion of primary motor cortex. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 5343-6	0.9	

151	CT based assessment of mechanical deformation of designed PTMC scaffolds. *Clinical Hemorheology and Microcirculation*, **2015**, 60, 99-108	2.5	8
150	Computational Model of Ca2+ Wave Propagation in Human Retinal Pigment Epithelial ARPE-19 Cells. *PLoS ONE*, **2015**, 10, e0128434	3.7	8
149	Dynamics of intracranial electroencephalographic recordings from epilepsy patients using univariate and bivariate recurrence networks. *Physical Review E*, **2015**, 91, 022927	2.4	17
148	Investigating the possible effect of electrode support structure on motion artifact in wearable bioelectric signal monitoring. *BioMedical Engineering OnLine*, **2015**, 14, 44	4.1	29
147	A fast stimulability screening protocol for neuronal cultures on microelectrode arrays. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 3440-3	0.9	
146	Controlling cell migration and adhesion into a scaffold by external electric currents. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 3549-52	0.9	1
145	Human induced pluripotent stem cell-derived versus adult cardiomyocytes: an in silico electrophysiological study on effects of ionic current block. *British Journal of Pharmacology*, **2015**, 172, 5147-60	8.6	42
144	Signatures of chaotic and stochastic dynamics uncovered with -recurrence networks. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20150349	2.4	9
143	Recurrence network analysis of wide band oscillations of local field potentials from the primary motor cortex reveals rich dynamics. **2015**,		2
142	Quantification and automatized adaptive detection of in vivo and in vitro neuronal bursts based on signal complexity. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 4729-32	0.9	4
141	Polypyrrole coating on poly-(lactide/glycolide)-tricalcium phosphate screws enhances new bone formation in rabbits. *Biomedical Materials (Bristol)*, **2015**, 10, 065016	3.5	7
140	Modeling and Experimental Characterization of Pressure Drop in Gravity-Driven Microfluidic Systems. *Journal of Fluids Engineering, Transactions of the ASME*, **2015**, 137,	2.1	17
139	Computer vision for virus image classification. *Biosystems Engineering*, **2015**, 138, 11-22	4.8	22
138	A motion artifact generation and assessment system for the rapid testing of surface biopotential electrodes. *Physiological Measurement*, **2015**, 36, 1-25	2.9	13
137	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. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 55-65	4.4	14
136	Finite element analysis of customized reconstruction plates for mandibular continuity defect therapy. *Journal of Biomechanics*, **2014**, 47, 264-8	2.9	49
135	Comparison of chondroitin sulfate and hyaluronic Acid doped conductive polypyrrole films for adipose stem cells. *Annals of Biomedical Engineering*, **2014**, 42, 1889-900	4.7	27
134	Video image-based analysis of single human induced pluripotent stem cell derived cardiomyocyte beating dynamics using digital image correlation. *BioMedical Engineering OnLine*, **2014**, 13, 39	4.1	57

133	Prediction of passive drug permeability across the blood-retinal barrier. *Pharmaceutical Research*, **2014**, 31, 2297-311	4.5	6
132	Bone loss patterns in cortical, subcortical, and trabecular compartments during simulated microgravity. *Journal of Applied Physiology*, **2014**, 117, 80-8	3.7	20
131	Characterization of dynamical systems under noise using recurrence networks: Application to simulated and EEG data. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2014**, 378, 3464-3474	2.3	25
130	**2014**,		2
129	Histogram-based classification of iPSC colony images using machine learning methods **2014**,		3
128	Center of Rotation Function as a General Method for Center of Rotation Detection **2014**,		1
127	Classification of iPSC colony images using hierarchical strategies with support vector machines **2014**,		2
126	Optical projection tomography as a tool for 3D imaging of hydrogels. *Biomedical Optics Express*, **2014**, 5, 3443-9	3.5	21
125	Investigating local spatially-enhanced structural and textural descriptors for classification of iPSC colony images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 3361-5	0.9	3
124	A multi-tissue segmentation of the human head for detailed computational models. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 2484-7	0.9	
123	Impedance spectroscopy of changes in skin-electrode impedance induced by motion. *BioMedical Engineering OnLine*, **2014**, 13, 149	4.1	19
122	Characterization of microstructures using contour tree connectivity for fluid flow analysis. *Journal of the Royal Society Interface*, **2014**, 11, 20131042	4.1	10
121	Accurate Cortical Bone Detection in Peripheral Quantitative Computed Tomography Images. *IFMBE Proceedings*, **2014**, 289-292	0.2	2
120	In vitro electroretinogram for the study of the functionality of differentiated retinal pigment epithelium cells. *Medical and Biological Engineering and Computing*, **2013**, 51, 61-70	3.1	1
119	Analysis of nonlinear dynamics of healthy and epileptic EEG signals using recurrence based complex network approach **2013**,		10
118	Impedance spectra of polypyrrole coated platinum electrodes. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 539-42	0.9	2
117	Novel polypyrrole-coated polylactide scaffolds enhance adipose stem cell proliferation and early osteogenic differentiation. *Tissue Engineering - Part A*, **2013**, 19, 882-92	3.9	74
116	Intercellular Ca(2+) wave propagation in human retinal pigment epithelium cells induced by mechanical stimulation. *Experimental Eye Research*, **2013**, 108, 129-39	3.7	17

115	Effect of pressure and padding on motion artifact of textile electrodes. *BioMedical Engineering OnLine*, **2013**, 12, 26	4.1	65
114	Femoral neck cross-sectional geometry and exercise loading. *Clinical Physiology and Functional Imaging*, **2013**, 33, 258-66	2.4	13
113	Computational models of ventricular- and atrial-like human induced pluripotent stem cell derived cardiomyocytes. *Annals of Biomedical Engineering*, **2013**, 41, 2334-48	4.7	68
112	Novel electrode configuration for highly linear impedance pneumography. *Biomedizinische Technik*, **2013**, 58, 35-8	1.3	27
111	Contour tree connectivity of binary images from algebraic graph theory **2013**,		3
110	Aquaporin expression and function in human pluripotent stem cell-derived retinal pigmented epithelial cells **2013**, 54, 3510-9		31
109	Cardiomyocyte MEA data analysis (CardioMDA)--a novel field potential data analysis software for pluripotent stem cell derived cardiomyocytes. *PLoS ONE*, **2013**, 8, e73637	3.7	24
108	Non-Binary Coding for Texture Descriptors in Sub-Cellular and Stem Cell Image Classification. *Current Bioinformatics*, **2013**, 8, 208-219	4.7	39
107	Analysis of trabecular bone microstructure using contour tree connectivity. *Lecture Notes in Computer Science*, **2013**, 16, 428-35	0.9	2
106	Computational model of Ca2+ wave propagation in human retinal pigment epithelium. *Acta Ophthalmologica*, **2013**, 91, 0-0	3.7	
105	Postoperative sternal stability assessed by vibration: a preliminary study. *Annals of Thoracic Surgery* , **2012**, 94, 260-4	2.7	4
104	Multilead measurement system for the time-domain analysis of bioimpedance magnitude. *IEEE Transactions on Biomedical Engineering*, **2012**, 59, 2273-80	5	6
103	Electric impedance of human embryonic stem cell-derived retinal pigment epithelium. *Medical and Biological Engineering and Computing*, **2012**, 50, 107-16	3.1	14
102	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. *Atherosclerosis*, **2012**, 220, 387-93	3.1	77
101	Threshold-free automatic detection of cortical bone geometry by peripheral quantitative computed tomography. *Journal of Clinical Densitometry*, **2012**, 15, 413-421	3.5	5
100	Model for long QT syndrome type 2 using human iPS cells demonstrates arrhythmogenic characteristics in cell culture. *DMM Disease Models and Mechanisms*, **2012**, 5, 220-30	4.1	228
99	Burst analysis tool for developing neuronal networks exhibiting highly varying action potential dynamics. *Frontiers in Computational Neuroscience*, **2012**, 6, 38	3.5	49
98	Binary image representation by contour trees **2012**,		3

97	Implantable Measurement System for Dairy-Cattle Monitoring with Long Recording Time. *Advances in Science and Technology*, **2012**, 85, 33-38	0.1	2
96	Direct laser writing and geometrical analysis of scaffolds with designed pore architecture for three-dimensional cell culturing. *Journal of Micromechanics and Microengineering*, **2012**, 22, 115016	2	32
95	Atomic layer deposited iridium oxide thin film as microelectrode coating in stem cell applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2012**, 30, 041501	2.9	8
94	Experimental Comparison of Geometric, Arithmetic and Harmonic Means for EEG Event Related Potential Detection **2012**,		1
93	Human pluripotent stem cell derived retinal pigment epithelium fulfills requirements of the in vitro functionality. *Acta Ophthalmologica*, **2012**, 90, 0-0	3.7	
92	A method for suppressing cardiogenic oscillations in impedance pneumography. *Physiological Measurement*, **2011**, 32, 337-45	2.9	20
91	The effects of vibration loading on adipose stem cell number, viability and differentiation towards bone-forming cells. *Journal of the Royal Society Interface*, **2011**, 8, 1736-47	4.1	63
90	Determination of bioceramic filler distribution and porosity of self-reinforced bioabsorbable composites using micro-computed tomography. *Composites Part A: Applied Science and Manufacturing*, **2011**, 42, 534-542	8.4	3
89	All Titanium Microelectrode Array for Field Potential Measurements from Neurons and Cardiomyocytes□A Feasibility Study. *Micromachines*, **2011**, 2, 394-409	3.3	6
88	Anatomical sector analysis of load-bearing tibial bone structure during 90-day bed rest and 1-year recovery. *Clinical Physiology and Functional Imaging*, **2011**, 31, 249-57	2.4	13
87	Arterial tension time reflects subclinical atherosclerosis, arterial stiffness and stroke volume. *Clinical Physiology and Functional Imaging*, **2011**, 31, 464-71	2.4	5
86	Averaging in vitro cardiac field potential recordings obtained with microelectrode arrays. *Computer Methods and Programs in Biomedicine*, **2011**, 104, 199-205	6.9	11
85	Impedance spectroscopy in monitoring the maturation of stem cell-derived retinal pigment epithelium. *Annals of Biomedical Engineering*, **2011**, 39, 3055-69	4.7	11
84	**2011**,		3
83	Recording cortical EEG subcortically □Improved EEG monitoring from depth-stimulation electrodes **2011**,		1
82	Toward the defined and xeno-free differentiation of functional human pluripotent stem cell-derived retinal pigment epithelial cells. *Molecular Vision*, **2011**, 17, 558-75	2.3	110
81	Modelling Approach for Assessment of Electrode Configuration and Placement in Bioimpedance Measurements of Skin Irritation. *IFMBE Proceedings*, **2011**, 1238-1241	0.2	3
80	Value of leads V4R and CM5 in the detection of coronary artery disease during exercise electrocardiographic test. *Clinical Physiology and Functional Imaging*, **2010**, 30, 308-12	2.4	6

79	Usability evaluation of a web-based patient information system for individuals with severe mental health problems. *Journal of Advanced Nursing*, **2010**, 66, 2701-10	3.1	23
78	The significance of relative conductivity on thin layers in EEG sensitivity distributions. *Biomedizinische Technik*, **2010**, 55, 123-31	1.3	2
77	Similarly derived and cultured hESC lines show variation in their developmental potential towards neuronal cells in long-term culture. *Regenerative Medicine*, **2010**, 5, 749-62	2.5	56
76	The influence of age and skull conductivity on surface and subdermal bipolar EEG leads. *Computational Intelligence and Neuroscience*, **2010**, 2010, 397272	3	43
75	Assessment of pulmonary flow using impedance pneumography. *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 2277-85	5	61
74	Wireless, multipurpose in-home health monitoring platform: two case trials. *IEEE Transactions on Information Technology in Biomedicine*, **2010**, 14, 447-55		66
73	Design and implementation of a portable long-term physiological signal recorder. *IEEE Transactions on Information Technology in Biomedicine*, **2010**, 14, 718-25		34
72	New precordial bipolar electrocardiographic leads for detecting left ventricular hypertrophy. *Journal of Electrocardiology*, **2010**, 43, 654-9	1.4	4
71	Enhanced bone structural analysis through pQCT image preprocessing. *Medical Engineering and Physics*, **2010**, 32, 398-406	2.4	8
70	Estimating the measuring sensitivity of unipolar and bipolar ECG with lead field method and FDM models. *Computer Methods and Programs in Biomedicine*, **2009**, 94, 161-7	6.9	1
69	Best electrode locations for a small bipolar ECG device: signal strength analysis of clinical data. *Annals of Biomedical Engineering*, **2009**, 37, 331-6	4.7	35
68	Region of interest sensitivity ratio in analyzing sensitivity distributions of electrocardiographic measurements. *Annals of Biomedical Engineering*, **2009**, 37, 692-701	4.7	
67	Ballistocardiogaphic studies with acceleration and electromechanical film sensors. *Medical Engineering and Physics*, **2009**, 31, 1154-65	2.4	14
66	Targeted exercises against hip fragility. *Osteoporosis International*, **2009**, 20, 1321-8	5.3	95
65	2D texture based classification, segmentation and 3D orientation estimation of tissues using DT-CWT feature extraction methods. *Data and Knowledge Engineering*, **2009**, 68, 1383-1397	1.5	6
64	DexterNet: An Open Platform for Heterogeneous Body Sensor Networks and its Applications **2009**,		48
63	Utilization of wireless sensor network for health monitoring in home environment **2009**,		8
62	Human embryonic stem cell-derived neuronal cells form spontaneously active neuronal networks in vitro. *Experimental Neurology*, **2009**, 218, 109-16	5.7	87

61	Assessment of Breathing Parameters during Running with a Wearable Bioimpedance Device. *IFMBE Proceedings*, **2009**, 1088-1091	0.2	8
60	Building Trust on Body Sensor Network Signals. *IFMBE Proceedings*, **2009**, 887-890	0.2	
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