Peter Kohl

List of Publications by Year
in descending order

214 papers	11,191 citations	28274 55 h-index	36028 97 g-index
227 all docs	227 docs citations	227 times ranked	10643 citing authors

#	Article	IF	Citations
1	Novel insights into the electrophysiology of murine cardiac macrophages: relevance of voltage-gated potassium channels. Cardiovascular Research, 2022, 118, 798-813.	3.8	18
2	Consecutive-Day Ventricular and Atrial Cardiomyocyte Isolations from the Same Heart: Shifting the Costâ€“Benefit Balance of Cardiac Primary Cell Research. Cells, 2022, 11, 233.	4.1	8
3	Ask not what The Journal can do for you1. Journal of Physiology, 2022, 600, 1537-1538.	2.9	2
4	Electron microscopy of cardiac 3D nanodynamics: form, function, future. Nature Reviews Cardiology, 2022, 19, 607-619.	13.7	5
5	Single cardiomyocytes from papillary muscles show lower preload-dependent activation of force compared to cardiomyocytes from the left ventricular free wall. Journal of Molecular and Cellular Cardiology, 2022, 166, 127-136.	1.9	3
6	Benchmarking of Cph1 Mutants and <i>Dr</i>BphP for Lightâ€Responsive Phytochromeâ€Based Hydrogels with Reversibly Adjustable Mechanical Properties. Advanced Biology, 2022, 6, e2000337.	2.5	5
7	Cardiac Mechano-Electric Coupling: Acute Effects of Mechanical Stimulation on Heart Rate and Rhythm. Physiological Reviews, 2021, 101, 37-92.	28.8	96
8	Beat-by-Beat Cardiomyocyte T-Tubule Deformation Drives Tubular Content Exchange. Circulation Research, 2021, 128, 203-215.	4.5	26
9	Nano-scale morphology of cardiomyocyte t-tubule/sarcoplasmic reticulum junctions revealed by ultra-rapid high-pressure freezing and electron tomography. Journal of Molecular and Cellular Cardiology, 2021, 153, 86-92.	1.9	19
10	Piezo1 Channels Contribute to the Regulation of Human Atrial Fibroblast Mechanical Properties and Matrix Stiffness Sensing. Cells, 2021, 10, 663.	4.1	43
11	Small Conductance Ca2 +-Activated K+ (SK) Channel mRNA Expression in Human Atrial and Ventricular Tissue: Comparison Between Donor, Atrial Fibrillation and Heart Failure Tissue. Frontiers in Physiology, 2021, 12, 650964.	2.8	27
12	Heterogeneity and Remodeling of Ion Currents in Cultured Right Atrial Fibroblasts From Patients With Sinus Rhythm or Atrial Fibrillation. Frontiers in Physiology, 2021, 12, 673891.	2.8	4
13	Mechanoelectric feedback in the human heart: A causal affair. Heart Rhythm, 2021, 18, 1414-1415.	0.7	0
14	Piezo1 and BKCa channels in human atrial fibroblasts: Interplay and remodelling in atrial fibrillation. Journal of Molecular and Cellular Cardiology, 2021, 158, 49-62.	1.9	26
15	Genomic and physiological analyses of the zebrafish atrioventricular canal reveal molecular building blocks of the secondary pacemaker region. Cellular and Molecular Life Sciences, 2021, 78, 6669-6687.	5.4	6
16	Quantitative collagen assessment in right ventricular myectomies from patients with tetralogy of Fallot. Europace, 2021, 23, i38-i47.	1.7	5
17	Passive myocardial mechanical properties: meaning, measurement, models. Biophysical Reviews, 2021, 13, 587-610.	3.2	30
18	Novel Optics-Based Approaches for Cardiac Electrophysiology: A Review. Frontiers in Physiology, 2021, 12, 769586.	2.8	6

#	Article	IF	Citations
19	Mechanoâ€electric and mechanoâ€chemoâ€transduction in cardiomyocytes. Journal of Physiology, 2020, 598, 1285-1305.	2.9	30
20	Sinoatrial Node Structure, Mechanics, Electrophysiology and the Chronotropic Response to Stretch in Rabbit and Mouse. Frontiers in Physiology, 2020, 11, 809.	2.8	25
21	Inhibition of macrophage proliferation dominates plaque regression in response to cholesterol lowering. Basic Research in Cardiology, 2020, 115, 78.	5.9	37
22	The Lectin LecA Sensitizes the Human Stretch-Activated Channel TREK-1 but Not Piezo1 and Binds Selectively to Cardiac Non-myocytes. Frontiers in Physiology, 2020, 11, 457.	2.8	8
23	Concentric, Mems-Based Optoelectromechanical Pacer for Multimodal Cardiac Excitation. , 2020, , .		0
24	Electromechanical Assessment of Optogenetically Modulated Cardiomyocyte Activity. Journal of Visualized Experiments, 2020, , .	0.3	4
25	Mechanics and energetics in cardiac arrhythmias and heart failure. Journal of Physiology, 2020, 598, 1275-1277.	2.9	1
26	Expression and function of mechanosensitive ion channels in human valve interstitial cells. PLoS ONE, 2020, 15, e0240532.	2.5	13
27	Extent and spatial distribution of left atrial arrhythmogenic sites, late gadolinium enhancement at magnetic resonance imaging, and low-voltage areas in patients with persistent atrial fibrillation: comparison of imaging vs. electrical parameters of fibrosis and arrhythmogenesis. Europace, 2019, 21, 1484-1493.	1.7	49
28	Editorial. Progress in Biophysics and Molecular Biology, 2019, 141, 1-2.	2.9	0
29	PBMB Commentary on Editorial by Keith Baverstock. Progress in Biophysics and Molecular Biology, 2019, 149, 3.	2.9	0
30	The Institute for Experimental Cardiovascular Medicine in Freiburg. Biophysical Reviews, 2019, 11, 675-677.	3.2	2
31	The NSL complex maintains nuclear architecture stability via lamin A/C acetylation. Nature Cell Biology, 2019, 21, 1248-1260.	10.3	61
32	Primary cilia defects causing mitral valve prolapse. Science Translational Medicine, 2019, 11, .	12.4	76
33	Human Atrial Fibroblast Adaptation to Heterogeneities in Substrate Stiffness. Frontiers in Physiology, 2019, 10, 1526.	2.8	14
34	Junctophilin-2 expression rescues atrial dysfunction through polyadic junctional membrane complex biogenesis. JCI Insight, 2019, 4, .	5.0	23
35	Organotypic myocardial slices as model system to study heterocellular interactions. Cardiovascular Research, 2018, 114, 3-6.	3.8	9
36	Cardiac fibroblasts. Herzschrittmachertherapie Und Elektrophysiologie, 2018, 29, 62-69.	0.8	27

#	ARTICLE	IF	CITATIONS
37	Editorial. Progress in Biophysics and Molecular Biology, 2018, 132, 1-2.	2.9	1
38	Cardiac Stretch-Activated Channels and Mechano-Electric Coupling. , 2018, , 128-139.		2
39	Mitochondrial Reactive Oxygen Species in Lipotoxic Hearts Induce Post-Translational Modifications of AKAP121, DRP1, and OPA1 That Promote Mitochondrial Fission. Circulation Research, 2018, 122, 58-73.	4.5	225
40	Species differences in the morphology of transverse tubule openings in cardiomyocytes. Europace, 2018, 20, iii120-iii124.	1.7	19
41	Invasive Optical Pacing in Perfused, Optogenetically Modified Mouse Heart Using Stiff Multi-LED Optical Probes. , 2018, 2018, 1-4.		3
42	Influence of left atrial size on P-wave morphology: differential effects of dilation and hypertrophy. Europace, 2018, 20, iii36-iii44.	1.7	32
43	Potassium channel-based optogenetic silencing. Nature Communications, 2018, 9, 4611.	12.8	71
44	Cardiac Electrophysiological Effects of Light-Activated Chloride Channels. Frontiers in Physiology, 2018, 9, 1806.	2.8	36
45	Progress in biophysics and molecular biology: A brief history of the journal. Progress in Biophysics and Molecular Biology, 2018, 140, 1-4.	2.9	3
46	Solute movement in the t-tubule system of rabbit and mouse cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7073-E7080.	7.1	14
47	Sodium permeable and â€œhypersensitiveâ€•<scp>TREK</scp> â€•1 channels cause ventricular tachycardia. EMBO Molecular Medicine, 2017, 9, 403-414.	6.9	65
48	Macrophages Facilitate Electrical Conduction in the Heart. Cell, 2017, 169, 510-522.e20.	28.9	703
49	Sub-microscopic analysis of t-tubule geometry in living cardiac ventricular myocytes using a shape-based analysis method. Journal of Molecular and Cellular Cardiology, 2017, 108, 1-7.	1.9	26
50	Quantitative assessment of passive electrical properties of the cardiac T-tubular system by FRAP microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5737-5742.	7.1	46
51	Transformation diffusion reconstruction of three-dimensional histology volumes from two-dimensional image stacks. Medical Image Analysis, 2017, 38, 184-204.	11.6	15
52	Monte Carlo Simulations of Diffusion Weighted MRI in Myocardium: Validation and Sensitivity Analysis. IEEE Transactions on Medical Imaging, 2017, 36, 1316-1325.	8.9	15
53	Load-dependent effects of apelin on murine cardiomyocytes. Progress in Biophysics and Molecular Biology, 2017, 130, 333-343.	2.9	36
54	Optogenetic targeting of cardiac myocytes and non-myocytes: Tools, challenges and utility. Progress in Biophysics and Molecular Biology, 2017, 130, 140-149.	2.9	28

#	Article	IF	Citations
55	Caveolae in Rabbit Ventricular Myocytes: Distribution and Dynamic Diminution after CellÂIsolation. Biophysical Journal, 2017, 113, 1047-1059.	0.5	49
56	Mechanically Induced Ectopy via Stretch-Activated Cation-Nonselective Channels Is Caused by Local Tissue Deformation and Results in Ventricular Fibrillation if Triggered on the Repolarization Wave Edge (Commotio Cordis). Circulation: Arrhythmia and Electrophysiology, 2017, 10, .	4.8	35
57	High resolution structural evidence suggests the Sarcoplasmic Reticulum forms microdomains with Acidic Stores (lysosomes) in the heart. Scientific Reports, 2017, 7, 40620.	3.3	59
58	Evaluation of nonâ€Gaussian diffusion in cardiac MRI. Magnetic Resonance in Medicine, 2017, 78, 1174-1186.	3.0	12
59	Cell-accurate optical mapping across the entire developing heart. ELife, 2017, 6, .	6.0	48
60	Finding the culprit: who is turning hearts to stone?. Stem Cell Investigation, 2017, 4, 33-33.	3.0	1
61	Comparing maximum rate and sustainability of pacing by mechanical vs. electrical stimulation in the Langendorff-perfused rabbit heart. Europace, 2016, 18, iv85-iv93.	1.7	15
62	Electrotonic coupling of excitable and nonexcitable cells in the heart revealed by optogenetics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14852-14857.	7.1	217
63	Resolving Fine Cardiac Structures in Rats with High-Resolution Diffusion Tensor Imaging. Scientific Reports, 2016, 6, 30573.	3.3	47
64	Editorial to â€œDisturbances of cardiac wavelength and repolarization precede torsade de pointes and ventricular fibrillation in langendorff perfused rabbit heartsâ€•by Luc Hondeghem. Progress in Biophysics and Molecular Biology, 2016, 121, 1-2.	2.9	0
65	Rabbit models of cardiac mechano-electric and mechano-mechanical coupling. Progress in Biophysics and Molecular Biology, 2016, 121, 110-122.	2.9	46
66	A Bioreactor to Apply Multimodal Physical Stimuli to Cultured Cells. Methods in Molecular Biology, 2016, 1502, 21-33.	0.9	5
67	In Vivo Postâ€“Cardiac Arrest Myocardial Dysfunction Is Supported by Ca ²⁺ /Calmodulin-Dependent Protein Kinase IIâ€“Mediated Calcium Long-Term Potentiation and Mitigated by Alda-1, an Agonist of Aldehyde Dehydrogenase Type 2. Circulation, 2016, 134, 961-977.	1.6	17
68	Follow the white rabbit. Progress in Biophysics and Molecular Biology, 2016, 121, 75-76.	2.9	6
69	Mapping cardiac microstructure of rabbit heart in different mechanical states by high resolution diffusion tensor imaging: A proof-of-principle study. Progress in Biophysics and Molecular Biology, 2016, 121, 85-96.	2.9	24
70	Novel therapeutic strategies targeting fibroblasts and fibrosis in heart disease. Nature Reviews Drug Discovery, 2016, 15, 620-638.	46.4	251
71	Electron tomography of rabbit cardiomyocyte three-dimensional ultrastructure. Progress in Biophysics and Molecular Biology, 2016, 121, 77-84.	2.9	34
72	Prolongation of atrio-ventricular node conduction in a rabbit model of ischaemic cardiomyopathy: Role of fibrosis and connexin remodelling. Journal of Molecular and Cellular Cardiology, 2016, 94, 54-64.	1.9	22

#	Article	IF	Citations
73	Fibroblastâ€"myocyte coupling in the heart: Potential relevance for therapeutic interventions. Journal of Molecular and Cellular Cardiology, 2016, 91, 238-246.	1.9	87
74	Cardiac Mechano-Gated Ion Channels and Arrhythmias. Circulation Research, 2016, 118, 311-329.	4.5	173
75	The Living Scar â€" Cardiac Fibroblasts and the Injured Heart. Trends in Molecular Medicine, 2016, 22, 99-114.	6.7	136
76	Mechano-electric heterogeneity of the myocardium as a paradigm of its function. Progress in Biophysics and Molecular Biology, 2016, 120, 249-254.	2.9	19
77	Axial tubule junctions control rapid calcium signaling in atria. Journal of Clinical Investigation, 2016, 126, 3999-4015.	8.2	118
78	Which way to grow? Force over time may be the heartâ€™s Dao de jing. Global Cardiology Science & Practice, 2016, 2016, e201621.	0.4	0
79	Optimized radiofrequency coil setup for MR examination of living isolated rat hearts in a horizontal 9.4T magnet. Magnetic Resonance in Medicine, 2015, 73, 2398-2405.	3.0	3
80	Opportunities and challenges of current electrophysiology research: a plea to establish 'translational electrophysiology' curricula. Europace, 2015, 17, 825-833.	1.7	13
81	Cardiac tissue slices: preparation, handling, and successful optical mapping. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H1112-H1125.	3.2	52
82	Cardiac Stretchâ€"Activated Channels and Mechano-Electric Coupling. , 2014, , 139-149.		0
83	Quantitative Study of the Effect of Tissue Microstructure on Contraction in a Computational Model of Rat Left Ventricle. PLoS ONE, 2014, 9, e92792.	2.5	20
84	Interrogation of living myocardium in multiple static deformation states with diffusion tensor and diffusion spectrum imaging. Progress in Biophysics and Molecular Biology, 2014, 115, 213-225.	2.9	19
85	Three-dimensional histology: tools and application to quantitative assessment of cell-type distribution in rabbit heart. Europace, 2014, 16, iv86-iv95.	1.7	22
86	Structural and Functional Recoupling ofÂAtrial and Ventricular Myocardium. Journal of the American College of Cardiology, 2014, 64, 2586-2588.	2.8	7
87	Novel technologies as drivers of progress in cardiac biophysics. Progress in Biophysics and Molecular Biology, 2014, 115, 69-70.	2.9	3
88	Molecular candidates for cardiac stretch-activated ion channels. Global Cardiology Science & Practice, 2014, 2014, 19.	0.4	58
89	Cardiac mechano-electric coupling research: Fifty years of progress and scientific innovation. Progress in Biophysics and Molecular Biology, 2014, 115, 71-75.	2.9	58
90	Living cardiac tissue slices: An organotypic pseudo two-dimensional model for cardiac biophysics research. Progress in Biophysics and Molecular Biology, 2014, 115, 314-327.	2.9	22

#	Article	IF	Citations
91	The cardiac muscle duplex as a method to study myocardial heterogeneity. Progress in Biophysics and Molecular Biology, 2014, 115, 115-128.	2.9	19
92	Images as drivers of progress in cardiac computational modelling. Progress in Biophysics and Molecular Biology, 2014, 115, 198-212.	2.9	47
93	Fibroblastâ€"myocyte electrotonic coupling: Does it occur in native cardiac tissue?. Journal of Molecular and Cellular Cardiology, 2014, 70, 37-46.	1.9	171
94	Effect of Fibre Orientation Optimisation in an Electromechanical Model of Left Ventricular Contraction in Rat. Lecture Notes in Computer Science, 2013, , 46-53.	1.3	3
95	A vision and strategy for the virtual physiological human: 2012 update. Interface Focus, 2013, 3, 20130004.	3.0	74
96	Integrative approaches to computational biomedicine. Interface Focus, 2013, 3, 20130003.	3.0	10
97	From ion channel to organismic phenotype: An example of integrative translational research into cardiac electromechanics. Heart Rhythm, 2013, 10, 1542-1543.	0.7	3
98	Combining wet and dry research: experience with model development for cardiac mechano-electric structure-function studies. Cardiovascular Research, 2013, 97, 601-611.	3.8	72
99	Mechano-Electric Interactions and Their Role in Electrical Function of the Heart. , 2013, , 157-175.		0
100	Fast Measurement of Sarcomere Length and Cell Orientation in Langendorff-Perfused Hearts Using Remote Focusing Microscopy. Circulation Research, 2013, 113, 863-870.	4.5	30
101	Rearrangement of Atrial Bundle Architecture and Consequent Changes in Anisotropy of Conduction Constitute the 3-Dimensional Substrate for Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 967-975.	4.8	67
102	Resolving the Three-Dimensional Histology of the Heart. Lecture Notes in Computer Science, 2012, , 2-16.	1.3	3
103	Simultaneous Voltage and Calcium Mapping of Genetically Purified Human Induced Pluripotent Stem Cellâ€"Derived Cardiac Myocyte Monolayers. Circulation Research, 2012, 110, 1556-1563.	4.5	187
104	Microscopic magnetic resonance imaging reveals high prevalence of third coronary artery in human and rabbit heart. Europace, 2012, 14, v73-v81.	1.7	7
105	Palette of fluorinated voltage-sensitive hemicyanine dyes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20443-20448.	7.1	162
106	Histo-anatomical structure of the living isolated rat heart in two contraction states assessed by diffusion tensor MRI. Progress in Biophysics and Molecular Biology, 2012, 110, 319-330.	2.9	96
107	Fibroblastâ€"myocyte connections in the heart. Heart Rhythm, 2012, 9, 461-464.	0.7	61
108	Application of cardiac electrophysiology simulations to proâ€arrhythmic safety testing. British Journal of Pharmacology, 2012, 167, 932-945.	5.4	90

#	Article	IF	Citations
109	Mechanical modulation of the transverse tubular system of ventricular cardiomyocytes. Progress in Biophysics and Molecular Biology, 2012, 110, 218-225.	2.9	24
110	Off-patient assessment of pre-cordial impact mechanics among medical professionals in North-East Italy involved in emergency cardiac resuscitation. Progress in Biophysics and Molecular Biology, 2012, 110, 390-396.	2.9	5
111	Progress in Biophysics and Molecular Biology of the Beating Heart. Progress in Biophysics and Molecular Biology, 2012, 110, 151-153.	2.9	4
112	Mechano-sensitivity of cardiac pacemaker function: Pathophysiological relevance, experimental implications, and conceptual integration with other mechanisms of rhythmicity. Progress in Biophysics and Molecular Biology, 2012, 110, 257-268.	2.9	70
113	Flash Photolysis of Caged Compounds during Simultaneous Imaging of Calcium and Voltage in the Whole Heart using Light-Emitting-Diodes. Biophysical Journal, 2012, 102, 671a.	0.5	0
114	Cardiac electrophysiological imaging systems scalable for high-throughput drug testing. Pflugers Archiv European Journal of Physiology, 2012, 464, 645-656.	2.8	10
115	Simultaneous measurement and modulation of multiple physiological parameters in the isolated heart using optical techniques. Pflugers Archiv European Journal of Physiology, 2012, 464, 403-414.	2.8	32
116	In Situ Optical Mapping of Voltage and Calcium in the Heart. PLoS ONE, 2012, 7, e42562.	2.5	36
117	Single-sensor system for spatially resolved, continuous, and multiparametric optical mapping of cardiac tissue. Heart Rhythm, 2011, 8, 1482-1491.	0.7	64
118	To the Editorâ€”Resolving the M-cell debate: Mechanics Matters. Heart Rhythm, 2011, 8, e1.	0.7	2
119	The Virtual Physiological Human. Interface Focus, 2011, 1, 281-285.	3.0	13
120	Mechano-Electric Feedback in the Heart: Effects on Heart Rate and Rhythm. , 2011, , 133-151.		5
121	Systems biology of the heart: hype or hope?. Annals of the New York Academy of Sciences, 2011, 1245, 40-43.	3.8	24
122	Rabbit-specific ventricular model of cardiac electrophysiological function including specialized conduction system. Progress in Biophysics and Molecular Biology, 2011, 107, 90-100.	2.9	62
123	Minimum Information about a Cardiac Electrophysiology Experiment (MICEE): Standardised reporting for model reproducibility, interoperability, and data sharing. Progress in Biophysics and Molecular Biology, 2011, 107, 4-10.	2.9	75
124	Assessment of contractility in intact ventricular cardiomyocytes using the dimensionless â€˜Frankâ€“Starling Gainâ€™ index. Pflugers Archiv European Journal of Physiology, 2011, 462, 39-48.	2.8	42
125	Progressive changes in <i>T</i>₁, <i>T</i>₂ and leftâ€ventricular histoâ€architecture in the fixed and embedded rat heart. NMR in Biomedicine, 2011, 24, 836-843.	2.8	31
126	Mechanical triggers and facilitators of ventricular tachy-arrhythmias. , 2011, , 160-167.		5

#	Article	IF	Citations
127	Anti-arrhythmic effects of acute mechanical stimulation. , 2011, , 361-368.		6
128	Rediscovering the third coronary artery. European Heart Journal, 2011, 32, 1435-7.	2.2	2
129	Virtual physiological human: training challenges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2841-2851.	3.4	15
130	The virtual physiological human: computer simulation for integrative biomedicine I. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2591-2594.	3.4	17
131	The virtual physiological human: computer simulation for integrative biomedicine II. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2837-2839.	3.4	11
132	A vision and strategy for the virtual physiological human in 2010 and beyond. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2595-2614.	3.4	136
133	Imageâ€based models of cardiac structure in health and disease. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2010, 2, 489-506.	6.6	113
134	Systems Biology: An Approach. Clinical Pharmacology and Therapeutics, 2010, 88, 25-33.	4.7	198
135	The Systems Biology Approach to Drug Development: Application to Toxicity Assessment of Cardiac Drugs. Clinical Pharmacology and Therapeutics, 2010, 88, 130-134.	4.7	60
136	Temporal pixel multiplexing for simultaneous high-speed, high-resolution imaging. Nature Methods, 2010, 7, 209-211.	19.0	79
137	Part 5: Adult Basic Life Support: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations. Circulation, 2010, 122, S298-S324.	1.6	145
138	Extracorporeal cardiac mechanical stimulation: precordial thump and precordial percussion. British Medical Bulletin, 2010, 93, 161-177.	6.9	16
139	Development of an anatomically detailed MRI-derived rabbit ventricular model and assessment of its impact on simulations of electrophysiological function. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H699-H718.	3.2	192
140	Spatial regulation of intracellular pH in multicellular strands of neonatal rat cardiomyocytes. Cardiovascular Research, 2010, 85, 729-738.	3.8	11
141	Cardiac valve annulus manual segmentation using computer assisted visual feedback in three-dimensional image data. , 2010, 2010, 738-41.		4
142	Towards High-Resolution Cardiac Atlases: Ventricular Anatomy Descriptors for a Standardized Reference Frame. Lecture Notes in Computer Science, 2010, , 75-84.	1.3	1
143	Axial Stretch of Rat Single Ventricular Cardiomyocytes Causes an Acute and Transient Increase in Ca ²⁺ Spark Rate. Circulation Research, 2009, 104, 787-795.	4.5	199
144	Systems biology and the virtual physiological human. Molecular Systems Biology, 2009, 5, 292.	7.2	154

#	Article	IF	Citations
145	Utility of pre-cordial thump for treatment of out of hospital cardiac arrest: A prospective study. Resuscitation, 2009, 80, 17-23.	3.0	49
146	Myocardial tissue slices: organotypic pseudo-2D models for cardiac research & development. Future Cardiology, 2009, 5, 425-430.	1.2	32
147	The virtual physiological human: tools and applications II. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2121-2123.	3.4	7
148	Effects of fibroblast-myocyte coupling on cardiac conduction and vulnerability to reentry: A computational study. Heart Rhythm, 2009, 6, 1641-1649.	0.7	163
149	Cellular Open Resource (COR): current status and future directions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1885-1905.	3.4	45
150	Using high-resolution displays for high-resolution cardiac data. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2667-2677.	3.4	6
151	Generation of histo-anatomically representative models of the individual heart: tools and application. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2257-2292.	3.4	135
152	The virtual physiological human: tools and applications I. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1817-1821.	3.4	11
153	The Role of Blood Vessels in Rabbit Propagation Dynamics and Cardiac Arrhythmias. Lecture Notes in Computer Science, 2009, , 268-276.	1.3	11
154	High-resolution displays for high-resolution data. , 2009, , 18-20.		0
155	Axial stretch enhances sarcoplasmic reticulum Ca2+ leak and cellular Ca2+ reuptake in guinea pig ventricular myocytes: Experiments and models. Progress in Biophysics and Molecular Biology, 2008, 97, 298-311.	2.9	45
156	Life and mechanosensitivity. Progress in Biophysics and Molecular Biology, 2008, 97, 159-162.	2.9	11
157	Editorial. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2975-2978.	3.4	39
158	Editorial. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3223-3224.	3.4	6
159	High Performance Computer Simulations of Cardiac Electrical Function Based on High Resolution MRI Datasets. Lecture Notes in Computer Science, 2008, , 571-580.	1.3	8
160	Mechanoelectrical Interactions and Their Role in Electrical Function of the Heart. , 2008, , 145-160.		0
161	AN ITERATIVE METHOD FOR REGISTRATION OF HIGH-RESOLUTION CARDIAC HISTOANATOMICAL AND MRI IMAGES. , 2007, , .		5
162	Force-length relations in isolated intact cardiomyocytes subjected to dynamic changes in mechanical load. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H1487-H1497.	3.2	135

#	Article	IF	Citations
163	3D Visualization of Cardiac Anatomical MRI Data with Para-Cellular Resolution. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 147-51.	0.5	4
164	Cardiac myocyteâ€“nonmyocyte electrotonic coupling: Implications for ventricular arrhythmogenesis. Heart Rhythm, 2007, 4, 233-235.	0.7	41
165	Electrocardiography and imaging. Journal of Electrocardiology, 2007, 40, S66-S70.	0.9	1
166	Digital Human Modelling: A Global Vision and a European Perspective. Lecture Notes in Computer Science, 2007, , 549-558.	1.3	8
167	Myocardial ischemia lowers precordial thump efficacy: An inquiry into mechanisms using three-dimensional simulations. Heart Rhythm, 2006, 3, 179-186.	0.7	44
168	Structural and Functional Coupling of Cardiac Myocytes and Fibroblasts. , 2006, 42, 132-149.		86
169	AB23-2. Heart Rhythm, 2006, 3, S47.	0.7	1
170	P1-13. Heart Rhythm, 2006, 3, S111-S112.	0.7	4
171	P5-22. Heart Rhythm, 2006, 3, S267.	0.7	0
172	Modulatory effect of calmodulin-dependent kinase II (CaMKII) on sarcoplasmic reticulum Ca 2+ handling and intervalâ€“force relations: a modelling study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1107-1133.	3.4	35
173	Mathematical models in physiology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1099-1106.	3.4	41
174	Micropatterned cell cultures on elastic membranes as an in vitro model of myocardium. Nature Protocols, 2006, 1, 1379-1391.	12.0	77
175	Effects of mechanosensitive ion channels on ventricular electrophysiology: experimental and theoretical models. Experimental Physiology, 2006, 91, 307-321.	2.0	115
176	Three-Dimensional Models of Individual Cardiac Histoanatomy: Tools and Challenges. Annals of the New York Academy of Sciences, 2006, 1080, 301-319.	3.8	89
177	Electron-conformational model of ryanodine receptor lattice dynamics. Progress in Biophysics and Molecular Biology, 2006, 90, 88-103.	2.9	17
178	Soft tissue impact characterisation kit (STICK) for ex situ investigation of heart rhythm responses to acute mechanical stimulation. Progress in Biophysics and Molecular Biology, 2006, 90, 444-468.	2.9	14
179	Microstructured Cocultures of Cardiac Myocytes and Fibroblasts: A Two-Dimensional<i>In Vitro</i>Model of Cardiac Tissue. Microscopy and Microanalysis, 2005, 11, 249-259.	0.4	71
180	Species- and Preparation-Dependence of Stretch Effects on Sino-Atrial Node Pacemaking. Annals of the New York Academy of Sciences, 2005, 1047, 324-335.	3.8	58

#	Article	IF	Citations
181	Electrical coupling of fibroblasts and myocytes: relevance for cardiac propagation. Journal of Electrocardiology, 2005, 38, 45-50.	0.9	206
182	Dimensionality in cardiac modelling. Progress in Biophysics and Molecular Biology, 2005, 87, 47-66.	2.9	52
183	Hybrid duplex: a novel method to study the contractile function of heterogeneous myocardium. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H2733-H2746.	3.2	14
184	Defining Commotio cordis. Heart Rhythm, 2005, 2, 902.	0.7	2
185	Structural and functional characterisation of cardiac fibroblasts. Cardiovascular Research, 2005, 65, 40-51.	3.8	782
186	Cardiac cellular heterogeneity and remodelling. Cardiovascular Research, 2004, 64, 195-197.	3.8	25
187	Fibroblast Network in Rabbit Sinoatrial Node. Circulation Research, 2004, 94, 828-835.	4.5	317
188	Spatially and temporally distinct expression of fibroblast connexins after sheep ventricular infarction. Cardiovascular Research, 2004, 62, 415-425.	3.8	157
189	Mechanical Induction of Arrhythmias during Ventricular Repolarization: Modeling Cellular Mechanisms and Their Interaction in Two Dimensions. Annals of the New York Academy of Sciences, 2004, 1015, 133-143.	3.8	47
190	Induction of ventricular arrhythmias following mechanical impact: A simulation study in 3D. Journal of Molecular Histology, 2004, 35, 679-686.	2.2	56
191	Effect of stretch-activated channels on defibrillation efficacy. Heart Rhythm, 2004, 1, 67-77.	0.7	57
192	Force Generation for Locomotion of Vertebrates: Skeletal Muscle Overview. IEEE Journal of Oceanic Engineering, 2004, 29, 684-691.	3.8	35
193	Interrelation of Cardiac Fibroblasts and Myocytes: New Tools and Insights. Microscopy and Microanalysis, 2004, 10, 1398-1399.	0.4	0
194	Mechano-electric interactions in heterogeneous myocardium: development of fundamental experimental and theoretical models. Progress in Biophysics and Molecular Biology, 2003, 82, 207-220.	2.9	81
195	Cardiac mechano-electric feedback: past, present, and prospect. Progress in Biophysics and Molecular Biology, 2003, 82, 3-9.	2.9	83
196	Effects of acute ventricular volume manipulation on in situ cardiomyocyte cell membrane configuration. Progress in Biophysics and Molecular Biology, 2003, 82, 221-227.	2.9	56
197	Oneâ€Dimensional Rabbit Sinoatrial Node Models:. Journal of Cardiovascular Electrophysiology, 2003, 14, S121-S132.	1.7	74
198	MECHANICAL INTERACTION OF HETEROGENEOUS CARDIAC MUSCLE SEGMENTS IN SILICO: EFFECTS ON Ca2+ HANDLING AND ACTION POTENTIAL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 3757-3782.	1.7	43

#	ARTICLE	IF	CITATIONS
199	A Novel Method for Quantifying the Contribution of Different Intracellular Mechanisms to Mechanically Induced Changes in Action Potential Characteristics. Lecture Notes in Computer Science, 2003, , 8-17.	1.3	6
200	CELLULAR OPEN RESOURCE (COR): A PUBLIC CELLML BASED ENVIRONMENT FOR MODELING BIOLOGICAL FUNCTION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 3579-3590.	1.7	65
201	Heterogeneous Cell Coupling in the Heart. Circulation Research, 2003, 93, 381-383.	4.5	93
202	Role of the 293b-sensitive, slowly activating delayed rectifier potassium current, iKs, in pacemaker activity of rabbit isolated sino-atrial node cells. Cardiovascular Research, 2002, 53, 68-79.	3.8	42
203	Comparative study of rabbit sino-atrial node cell models. Chaos, Solitons and Fractals, 2002, 13, 1623-1630.	5.1	14
204	Rediscovering commotio cordis. Lancet, The, 2001, 357, 1195-1197.	13.7	91
205	Sudden cardiac death by Commotio cordis: role of mechanoâ€“electric feedback. Cardiovascular Research, 2001, 50, 280-289.	3.8	117
206	Selected Contribution: Axial stretch increases spontaneous pacemaker activity in rabbit isolated sinoatrial node cells. Journal of Applied Physiology, 2000, 89, 2099-2104.	2.5	99
207	Computational modelling of biological systems: tools and visions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2000, 358, 579-610.	3.4	84
208	DIASTOLIC (DYS-)FUNCTION AND ELECTROPHYSIOLOGY. Cardiology Clinics, 2000, 18, 637-651.	2.2	3
209	NON-MUSCARINIC AND NON-NICOTINIC INHIBITION BY THE ACETYLCHOLINE ANALOGUE CARBACHOL OF THE DELAYED RECTIFIER POTASSIUM CURRENT, i K, IN RABBIT ISOLATED SINO-ATRIAL NODE CELLS. Experimental Physiology, 1999, 84, 631-638.	2.0	1
210	Stretch-induced changes in heart rate and rhythm: clinical observations, experiments and mathematical models. Progress in Biophysics and Molecular Biology, 1999, 71, 91-138.	2.9	249
211	Swellingâ€induced decrease in spontaneous pacemaker activity of rabbit isolated sinoâ€atrial node cells. Acta Physiologica Scandinavica, 1998, 164, 1-12.	2.2	35
212	Mechanosensitive connective tissue: potential influence on heart rhythm. Cardiovascular Research, 1996, 32, 62-68.	3.8	61
213	Spike activity of bulbar respiratory neurons in cats with myocardial ischemia: Microelectrode study. Bulletin of Experimental Biology and Medicine, 1988, 105, 776-780.	0.8	1
214	Rare syndromes, commotio cordis, sudden death in athletes. , 0, , 1148-1198.		1