Rebecca A B Burton

List of Publications by Year
in descending order

44	1,725	394286 19	330025 37
papers	citations	h-index	g-index

47	47	47	2288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Axial Stretch of Rat Single Ventricular Cardiomyocytes Causes an Acute and Transient Increase in Ca ²⁺ Spark Rate. Circulation Research, 2009, 104, 787-795.	2.0	199
2	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.	1.5	192
3	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.	1.6	135
4	Hydroxychloroquine reduces heart rate by modulating the hyperpolarization-activated current If: Novel electrophysiological insights and therapeutic potential. Heart Rhythm, 2015, 12, 2186-2194.	0.3	124
5	Optical control of excitation waves in cardiac tissue. Nature Photonics, 2015, 9, 813-816.	15.6	120
6	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.	1.4	96
7	Three-Dimensional Models of Individual Cardiac Histoanatomy: Tools and Challenges. Annals of the New York Academy of Sciences, 2006, 1080, 301-319.	1.8	89
8	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.	1.4	75
9	Measurement and analysis of sarcomere length in rat cardiomyocytes in situ and in vitro. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H1616-H1625.	1.5	69
10	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.	2.1	67
11	Two-pore Channels (TPC2s) and Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) at Lysosomal-Sarcoplasmic Reticular Junctions Contribute to Acute and Chronic Î²-Adrenoceptor Signaling in the Heart. Journal of Biological Chemistry, 2015, 290, 30087-30098.	1.6	63
12	High resolution structural evidence suggests the Sarcoplasmic Reticulum forms microdomains with Acidic Stores (lysosomes) in the heart. Scientific Reports, 2017, 7, 40620.	1.6	59
13	Caveolae in Rabbit Ventricular Myocytes: Distribution and Dynamic Diminution after CellÂIsolation. Biophysical Journal, 2017, 113, 1047-1059.	0.2	49
14	Resolving Fine Cardiac Structures in Rats with High-Resolution Diffusion Tensor Imaging. Scientific Reports, 2016, 6, 30573.	1.6	47
15	Progressive changes in T₁, T₂ and leftâ€ventricular histoâ€architecture in the fixed and embedded rat heart. NMR in Biomedicine, 2011, 24, 836-843.	1.6	31
16	Fast Measurement of Sarcomere Length and Cell Orientation in Langendorff-Perfused Hearts Using Remote Focusing Microscopy. Circulation Research, 2013, 113, 863-870.	2.0	30
17	Synaptic Plasticity in Cardiac Innervation and Its Potential Role in Atrial Fibrillation. Frontiers in Physiology, 2018, 9, 240.	1.3	25
18	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.	1.4	24

#	Article	IF	Citations
19	Three-dimensional histology: tools and application to quantitative assessment of cell-type distribution in rabbit heart. Europace, 2014, 16, iv86-iv95.	0.7	22
20	IP₃-mediated Ca²⁺ release regulates atrial Ca²⁺ transients and pacemaker function by stimulation of adenylyl cyclases. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H95-H107.	1.5	22
21	COSMAS: a lightweight toolbox for cardiac optical mapping analysis. Scientific Reports, 2021, 11, 9147.	1.6	20
22	Quantifying distortions in two-photon remote focussing microscope images using a volumetric calibration specimen. Frontiers in Physiology, 2014, 5, 384.	1.3	15
23	Optical Interrogation of Sympathetic Neuronal Effects on Macroscopic Cardiomyocyte Network Dynamics. IScience, 2020, 23, 101334.	1.9	13
24	Cardiac TdP risk stratification modelling of anti-infective compounds including chloroquine and hydroxychloroquine. Royal Society Open Science, 2021, 8, 210235.	1.1	13
25	Integrated approach for the study of anatomical variability in the cardiac Purkinje system: From high resolution MRI to electrophysiology simulation. , 2010, 2010, 6793-6.		11
26	The Role of Blood Vessels in Rabbit Propagation Dynamics and Cardiac Arrhythmias. Lecture Notes in Computer Science, 2009, , 268-276.	1.0	11
27	Ccoffinn: Automated Wave Tracking in Cultured Cardiac Monolayers. Biophysical Journal, 2016, 111, 1595-1599.	0.2	10
28	Microscopic magnetic resonance imaging reveals high prevalence of third coronary artery in human and rabbit heart. Europace, 2012, 14, v73-v81.	0.7	7
29	Mechanism of reentry induction by a 9-V battery in rabbit ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1041-H1053.	1.5	7
30	Highly trabeculated structure of the human endocardium underlies asymmetrical response to low-energy monophasic shocks. Chaos, 2017, 27, 093913.	1.0	6
31	AN ITERATIVE METHOD FOR REGISTRATION OF HIGH-RESOLUTION CARDIAC HISTOANATOMICAL AND MRI IMAGES. , 2007, , .		5
32	Emerging Evidence for cAMP-calcium Cross Talk in Heart Atrial Nanodomains Where IP₃-Evoked Calcium Release Stimulates Adenylyl Cyclases. Contact (Thousand Oaks) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.4	5
33	Cardiac valve annulus manual segmentation using computer assisted visual feedback in three-dimensional image data. , 2010, 2010, 738-41.		4
34	Macroâ€micro imaging of cardiacâ€“neural circuits in coâ€cultures from normal and diseased hearts. Journal of Physiology, 2015, 593, 3047-3053.	1.3	4
35	Resolving the Three-Dimensional Histology of the Heart. Lecture Notes in Computer Science, 2012, , 2-16.	1.0	3
36	Combining tissue engineering and optical imaging approaches to explore interactions along the neuro-cardiac axis. Royal Society Open Science, 2020, 7, 200265.	1.1	2

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37	Rediscovering the third coronary artery. European Heart Journal, 2011, 32, 1435-7.	1.0	2
38	Spatiotemporal Transitions in Cardiac Neuronal Co-Cultures. Biophysical Journal, 2014, 106, 630a.	0.2	1
39	A modified density gradient proteomic-based method to analyze endolysosomal proteins in cardiac tissue. IScience, 2021, 24, 102949.	1.9	1
40	Towards High-Resolution Cardiac Atlases: Ventricular Anatomy Descriptors for a Standardized Reference Frame. Lecture Notes in Computer Science, 2010, , 75-84.	1.0	1
41	CardioPulse Articles. European Heart Journal, 2011, 32, 1433-1439.	1.0	0
42	Quantitative imaging of intact cardiac tissue using remote focusing microscopy. , 2015, , .		0
43	Uniquely identifying cell orientation and sarcomere length in the intact rodent heart with oblique plane remote focussing microscopy. , 2015, , .		0
44	Imaging cardiomyocytes in intact tissue with a remote focusing microscope. , 2015, , .		0