# Rebecca A B Burton

## List of Publications by Citations



| | | | |
|---|---|---|---|
| 39 papers | 1,263 citations | 17 h-index | 35 g-index |
| 47 ext. papers | 1,593 ext. citations | 5.2 avg, IF | 3.88 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 39 | Axial stretch of rat single ventricular cardiomyocytes causes an acute and transient increase in Ca2+ spark rate. *Circulation Research*, **2009**, 104, 787-95 | 15.7 | 154 |
| 38 | 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, H699-718 | 5.2 | 143 |
| 37 | Generation of histo-anatomically representative models of the individual heart: tools and application. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 2257-92 | 3 | 127 |
| 36 | Hydroxychloroquine reduces heart rate by modulating the hyperpolarization-activated current If: Novel electrophysiological insights and therapeutic potential. *Heart Rhythm*, **2015**, 12, 2186-94 | 6.7 | 92 |
| 35 | Optical control of excitation waves in cardiac tissue. *Nature Photonics*, **2015**, 9, 813-816 | 33.9 | 81 |
| 34 | 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, 319-30 | 4.7 | 81 |
| 33 | Three-dimensional models of individual cardiac histoanatomy: tools and challenges. *Annals of the New York Academy of Sciences*, **2006**, 1080, 301-19 | 6.5 | 79 |
| 32 | Measurement and analysis of sarcomere length in rat cardiomyocytes in situ and in vitro. *American Journal of Physiology - Heart and Circulatory Physiology*, **2010**, 298, H1616-25 | 5.2 | 57 |
| 31 | 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, 967-75 | 6.4 | 46 |
| 30 | 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 | 4.7 | 45 |
| 29 | Two-pore Channels (TPC2s) and Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) at Lysosomal-Sarcoplasmic Reticular Junctions Contribute to Acute and Chronic Adrenoceptor Signaling in the Heart. *Journal of Biological Chemistry*, **2015**, 290, 30087-98 | 5.4 | 44 |
| 28 | High resolution structural evidence suggests the Sarcoplasmic Reticulum forms microdomains with Acidic Stores (lysosomes) in the heart. *Scientific Reports*, **2017**, 7, 40620 | 4.9 | 36 |
| 27 | Resolving Fine Cardiac Structures in Rats with High-Resolution Diffusion Tensor Imaging. *Scientific Reports*, **2016**, 6, 30573 | 4.9 | 33 |
| 26 | Progressive changes in T and T and left-ventricular histo-architecture in the fixed and embedded rat heart. *NMR in Biomedicine*, **2011**, 24, 836-43 | 4.4 | 31 |
| 25 | Caveolae in Rabbit Ventricular Myocytes: Distribution and Dynamic Diminution after Cell solation. *Biophysical Journal*, **2017**, 113, 1047-1059 | 2.9 | 23 |
| 24 | Fast measurement of sarcomere length and cell orientation in Langendorff-perfused hearts using remote focusing microscopy. *Circulation Research*, **2013**, 113, 863-70 | 15.7 | 22 |
| 23 | 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 | 4.7 | 17 |

| | | | |
|---|---|---|---|
| 22 | Synaptic Plasticity in Cardiac Innervation and Its Potential Role in Atrial Fibrillation. *Frontiers in Physiology*, **2018**, 9, 240 | 4.6 | 16 |
| 21 | Three-dimensional histology: tools and application to quantitative assessment of cell-type distribution in rabbit heart. *Europace*, **2014**, 16 Suppl 4, iv86-iv95 | 3.9 | 12 |
| 20 | The Role of Blood Vessels in Rabbit Propagation Dynamics and Cardiac Arrhythmias. *Lecture Notes in Computer Science*, **2009**, 268-276 | 0.9 | 10 |
| 19 | Quantifying distortions in two-photon remote focussing microscope images using a volumetric calibration specimen. *Frontiers in Physiology*, **2014**, 5, 384 | 4.6 | 8 |
| 18 | Integrated approach for the study of anatomical variability in the cardiac Purkinje system: from high resolution MRI to electrophysiology simulation. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 6793-6 | 0.9 | 8 |
| 17 | Optical Interrogation of Sympathetic Neuronal Effects on Macroscopic Cardiomyocyte Network Dynamics. *IScience*, **2020**, 23, 101334 | 6.1 | 8 |
| 16 | Ccoffinn: Automated Wave Tracking in Cultured Cardiac Monolayers. *Biophysical Journal*, **2016**, 111, 1595-1599 | 2.9 | 6 |
| 15 | Mechanism of reentry induction by a 9-V battery in rabbit ventricles. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 306, H1041-53 | 5.2 | 6 |
| 14 | Microscopic magnetic resonance imaging reveals high prevalence of third coronary artery in human and rabbit heart. *Europace*, **2012**, 14 Suppl 5, v73-v81 | 3.9 | 6 |
| 13 | IP-mediated Ca release regulates atrial Ca transients and pacemaker function by stimulation of adenylyl cyclases. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 320, H95-H107 | 5.2 | 6 |
| 12 | COSMAS: a lightweight toolbox for cardiac optical mapping analysis. *Scientific Reports*, **2021**, 11, 9147 | 4.9 | 5 |
| 11 | Highly trabeculated structure of the human endocardium underlies asymmetrical response to low-energy monophasic shocks. *Chaos*, **2017**, 27, 093913 | 3.3 | 4 |
| 10 | AN ITERATIVE METHOD FOR REGISTRATION OF HIGH-RESOLUTION CARDIAC HISTOANATOMICAL AND MRI IMAGES **2007**, | | 4 |
| 9 | Cardiac valve annulus manual segmentation using computer assisted visual feedback in three-dimensional image data. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 730-41 | 0.9 | 3 |
| 8 | Cardiac TdP risk stratification modelling of anti-infective compounds including chloroquine and hydroxychloroquine. *Royal Society Open Science*, **2021**, 8, 210235 | 3.3 | 3 |
| 7 | Macro-micro imaging of cardiac-neural circuits in co-cultures from normal and diseased hearts. *Journal of Physiology*, **2015**, 593, 3047-53 | 3.9 | 2 |
| 6 | Combining tissue engineering and optical imaging approaches to explore interactions along the neuro-cardiac axis. *Royal Society Open Science*, **2020**, 7, 200265 | 3.3 | 2 |
| 5 | Emerging Evidence for cAMP-calcium Cross Talk in Heart Atrial Nanodomains Where IP3-Evoked Calcium Release Stimulates Adenylyl Cyclases. *Contact (Thousand Oaks (Ventura County, Calif ))*, **2021**, 4, 251525642110083 | 2.6 | 2 |

| | | | |
|---|---|---|---|
| 4 | Rediscovering the third coronary artery. *European Heart Journal*, **2011**, 32, 1435-7 | 9.5 | 2 |
| 3 | Resolving the Three-Dimensional Histology of the Heart. *Lecture Notes in Computer Science*, **2012**, 2-16 | 0.9 | 1 |
| 2 | Towards High-Resolution Cardiac Atlases: Ventricular Anatomy Descriptors for a Standardized Reference Frame. *Lecture Notes in Computer Science*, **2010**, 75-84 | 0.9 | 1 |
| 1 | A modified density gradient proteomic-based method to analyze endolysosomal proteins in cardiac tissue. *IScience*, **2021**, 24, 102949 | 6.1 | 0 |