

# Christian Bollensdorff

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,870  
citations

304743

22  
h-index

289244

40  
g-index

52  
all docs

52  
docs citations

52  
times ranked

2685  
citing authors

#	ARTICLE	IF	CITATIONS
1	Axial Stretch of Rat Single Ventricular Cardiomyocytes Causes an Acute and Transient Increase in Ca <sup>2+</sup> Spark Rate. <i>Circulation Research</i> , 2009, 104, 787-795.	4.5	199
2	Simultaneous Voltage and Calcium Mapping of Genetically Purified Human Induced Pluripotent Stem Cell-Derived Cardiac Myocyte Monolayers. <i>Circulation Research</i> , 2012, 110, 1556-1563.	4.5	187
3	Palette of fluorinated voltage-sensitive hemicyanine dyes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20443-20448.	7.1	162
4	Generation of histo-anatomically representative models of the individual heart: tools and application. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009, 367, 2257-2292.	3.4	135
5	Effects of mechanosensitive ion channels on ventricular electrophysiology: experimental and theoretical models. <i>Experimental Physiology</i> , 2006, 91, 307-321.	2.0	115
6	Histo-anatomical structure of the living isolated rat heart in two contraction states assessed by diffusion tensor MRI. <i>Progress in Biophysics and Molecular Biology</i> , 2012, 110, 319-330.	2.9	96
7	Expression pattern of neuronal and skeletal muscle voltage-gated Na <sup>+</sup> channels in the developing mouse heart. <i>Journal of Physiology</i> , 2005, 564, 683-696.	2.9	95
8	Minimum Information about a Cardiac Electrophysiology Experiment (MICEE): Standardised reporting for model reproducibility, interoperability, and data sharing. <i>Progress in Biophysics and Molecular Biology</i> , 2011, 107, 4-10.	2.9	75
9	Measurement and analysis of sarcomere length in rat cardiomyocytes in situ and in vitro. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 298, H1616-H1625.	3.2	69
10	Mouse heart Na <sup>+</sup> channels: primary structure and function of two isoforms and alternatively spliced variants. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002, 282, H1007-H1017.	3.2	68
11	Single-sensor system for spatially resolved, continuous, and multiparametric optical mapping of cardiac tissue. <i>Heart Rhythm</i> , 2011, 8, 1482-1491.	0.7	64
12	Non-selective voltage-activated cation channel in the human red blood cell membrane. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1999, 1417, 9-15.	2.6	62
13	BK channel blockers inhibit potassium-induced proliferation of human astrocytoma cells. <i>NeuroReport</i> , 2002, 13, 403-407.	1.2	52
14	Cardiac tissue slices: preparation, handling, and successful optical mapping. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 308, H1112-H1125.	3.2	52
15	The b1 Subunit but not the b2 Subunit Colocalizes with the Human Heart Na <sup>+</sup> Channel (hH1) already within the Endoplasmic Reticulum. <i>Journal of Membrane Biology</i> , 2002, 186, 13-21.	2.1	43
16	Assessment of contractility in intact ventricular cardiomyocytes using the dimensionless â€œFrank-Starling Gainâ€™ index. <i>Pflugers Archiv European Journal of Physiology</i> , 2011, 462, 39-48.	2.8	42
17	Load-dependent effects of apelin on murine cardiomyocytes. <i>Progress in Biophysics and Molecular Biology</i> , 2017, 130, 333-343.	2.9	36
18	In Situ Optical Mapping of Voltage and Calcium in the Heart. <i>PLoS ONE</i> , 2012, 7, e42562.	2.5	36

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19	Simultaneous measurement and modulation of multiple physiological parameters in the isolated heart using optical techniques. <i>Pflugers Archiv European Journal of Physiology</i> , 2012, 464, 403-414.	2.8	32
20	Progressive changes in $T_1$ , $T_2$ and left ventricular histology architecture in the fixed and embedded rat heart. <i>NMR in Biomedicine</i> , 2011, 24, 836-843.	2.8	31
21	Fast Measurement of Sarcomere Length and Cell Orientation in Langendorff-Perfused Hearts Using Remote Focusing Microscopy. <i>Circulation Research</i> , 2013, 113, 863-870.	4.5	30
22	Role of atrial tissue remodeling on rotor dynamics: an in vitro study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H1964-H1973.	3.2	27
23	Living cardiac tissue slices: An organotypic pseudo two-dimensional model for cardiac biophysics research. <i>Progress in Biophysics and Molecular Biology</i> , 2014, 115, 314-327.	2.9	22
24	Interrogation of living myocardium in multiple static deformation states with diffusion tensor and diffusion spectrum imaging. <i>Progress in Biophysics and Molecular Biology</i> , 2014, 115, 213-225.	2.9	19
25	Exploring cardiac biophysical properties. <i>Global Cardiology Science &amp; Practice</i> , 2015, 2015, 10.	0.4	19
26	In Vivo Post Cardiac Arrest Myocardial Dysfunction Is Supported by $Ca^{2+}$ /Calmodulin-Dependent Protein Kinase II Mediated Calcium Long-Term Potentiation and Mitigated by Alda-1, an Agonist of Aldehyde Dehydrogenase Type 2. <i>Circulation</i> , 2016, 134, 961-977.	1.6	17
27	Amiloride derivatives are potent blockers of K ATP channels. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2001, 364, 351-358.	3.0	12
28	Na <sup>+</sup> current through KATP channels: consequences for Na <sup>+</sup> and K <sup>+</sup> fluxes during early myocardial ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 286, H283-H295.	3.2	12
29	Cardiac electrophysiological imaging systems scalable for high-throughput drug testing. <i>Pflugers Archiv European Journal of Physiology</i> , 2012, 464, 645-656.	2.8	10
30	Phenomenological modeling of cell-to-cell and beat-to-beat variability in isolated Guinea Pig ventricular myocytes. , 2010, 2010, 1457-60.		7
31	Microscopic magnetic resonance imaging reveals high prevalence of third coronary artery in human and rabbit heart. <i>Europace</i> , 2012, 14, v73-v81.	1.7	7
32	The covalently immobilized antimicrobial peptide LL37 acts as a VEGF mimic and stimulates endothelial cell proliferation. <i>Biochemical and Biophysical Research Communications</i> , 2018, 496, 887-890.	2.1	7
33	A New Humanized Mouse Model Mimics Humans in Lacking $\alpha$ -Gal Epitopes and Secreting Anti-Gal Antibodies. <i>Journal of Immunology</i> , 2020, 204, 1998-2005.	0.8	7
34	Cardiac valve annulus manual segmentation using computer assisted visual feedback in three-dimensional image data. , 2010, 2010, 738-41.		4
35	Progress in Biophysics and Molecular Biology of the Beating Heart. <i>Progress in Biophysics and Molecular Biology</i> , 2012, 110, 151-153.	2.9	4
36	KATP channel current increases in postinfarction remodeled cardiomyocytes. <i>Pflugers Archiv European Journal of Physiology</i> , 2006, 452, 428-434.	2.8	3

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37	Resolving the Three-Dimensional Histology of the Heart. Lecture Notes in Computer Science, 2012, , 2-16.	1.3	3
38	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
39	To the Editorâ€™Resolving the M-cell debate: Mechanics Matters. Heart Rhythm, 2011, 8, e1.	0.7	2
40	Surface Modification of Polytetrafluoroethylene and Polycaprolactone Promoting Cell-Selective Adhesion and Growth of Valvular Interstitial Cells. Journal of Functional Biomaterials, 2022, 13, 70.	4.4	2
41	Room Temperature vs Ice Cold - Temperature Effects on Cardiac Cell Action Potential. Biophysical Journal, 2016, 110, 587a.	0.5	1
42	Towards High-Resolution Cardiac Atlases: Ventricular Anatomy Descriptors for a Standardized Reference Frame. Lecture Notes in Computer Science, 2010, , 75-84.	1.3	1
43	Length-Dependent Active Tension Development In Single Intact Cardiomyocytes, Isolated From Different Regions Of Guinea Pig Heart. Biophysical Journal, 2009, 96, 223a.	0.5	0
44	The Effect of Apelin on Single Isolated Cardiac Myocytes from Wild-Type and Apelin / APJ KO Mice. Biophysical Journal, 2010, 98, 710a.	0.5	0
45	Single-Camera Multi-Parametric Optical Mapping During Local Excitation of Isolated Rat Heart. Biophysical Journal, 2011, 100, 318a.	0.5	0
46	Action Potential Duration Maps in Homogeneous Cardiac Ventricular Tissue Slices are Independent of Changes in Stimulation Site. Biophysical Journal, 2012, 102, 543a-544a.	0.5	0
47	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
48	Comparison of Functional Parameter Measured from Tissues Slices and Whole-Heart. Biophysical Journal, 2013, 104, 316a.	0.5	0
49	Electrophysiology of Cardiac Tissue Slices before, during, and after Stretch. Biophysical Journal, 2015, 108, 111a-112a.	0.5	0
50	Optimization of optical imaging of cardiac tissue slices as a tool in safety pharmacology. Journal of Pharmacological and Toxicological Methods, 2016, 81, 340.	0.7	0