Robin M Shaw

List of Publications by Citations

68 papers	4,556 citations	30 h-index	67 g-index
79 ext. papers	5,279 ext. citations	10.5 avg, IF	5.52 L-index

#	Paper	IF	Citations
68	Ionic mechanisms of propagation in cardiac tissue. Roles of the sodium and L-type calcium currents during reduced excitability and decreased gap junction coupling. *Circulation Research*, **1997**, 81, 727-41	15.7	452
67	Cardiac fibroblasts regulate myocardial proliferation through beta1 integrin signaling. *Developmental Cell*, **2009**, 16, 233-44	10.2	424
66	Microtubule plus-end-tracking proteins target gap junctions directly from the cell interior to adherens junctions. *Cell*, **2007**, 128, 547-60	56.2	374
65	Foxn4 directly regulates tbx2b expression and atrioventricular canal formation. *Genes and Development*, **2008**, 22, 734-9	12.6	258
64	Electrophysiologic effects of acute myocardial ischemia: a theoretical study of altered cell excitability and action potential duration. *Cardiovascular Research*, **1997**, 35, 256-72	9.9	222
63	Genetic and physiologic dissection of the vertebrate cardiac conduction system. *PLoS Biology*, **2008**, 6, e109	9.7	196
62	Stromal cell-derived factor-1alpha is cardioprotective after myocardial infarction. *Circulation*, **2008**, 117, 2224-31	16.7	182
61	Limited forward trafficking of connexin 43 reduces cell-cell coupling in stressed human and mouse myocardium. *Journal of Clinical Investigation*, **2010**, 120, 266-79	15.9	168
60	BIN1 localizes the L-type calcium channel to cardiac T-tubules. *PLoS Biology*, **2010**, 8, e1000312	9.7	158
59	Cardiac BIN1 folds T-tubule membrane, controlling ion flux and limiting arrhythmia. *Nature Medicine*, **2014**, 20, 624-32	50.5	150
58	Electrophysiologic effects of acute myocardial ischemia. A mechanistic investigation of action potential conduction and conduction failure. *Circulation Research*, **1997**, 80, 124-38	15.7	149
57	Mammalian electrophysiology on a microfluidic platform. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 9112-7	11.5	145
56	BIN1 is reduced and Cav1.2 trafficking is impaired in human failing cardiomyocytes. *Heart Rhythm*, **2012**, 9, 812-20	6.7	103
55	Actin cytoskeleton rest stops regulate anterograde traffic of connexin 43 vesicles to the plasma membrane. *Circulation Research*, **2012**, 110, 978-89	15.7	101
54	L-type calcium channel targeting and local signalling in cardiac myocytes. *Cardiovascular Research*, **2013**, 98, 177-86	9.9	100
53	Autoregulation of connexin43 gap junction formation by internally translated isoforms. *Cell Reports* , **2013**, 5, 611-8	10.6	95
52	Microfluidic application-specific integrated device for monitoring direct cell-cell communication via gap junctions between individual cell pairs. *Applied Physics Letters*, **2005**, 86, 223902	3.4	95

51	Cardiac T-Tubule Microanatomy and Function. *Physiological Reviews*, **2017**, 97, 227-252	47.9	91
50	Cardiac conduction is required to preserve cardiac chamber morphology. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 14662-7	11.5	90
49	Iroquois homeobox gene 3 establishes fast conduction in the cardiac His-Purkinje network. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 13576-81	11.5	84
48	The vulnerable window for unidirectional block in cardiac tissue: characterization and dependence on membrane excitability and intercellular coupling. *Journal of Cardiovascular Electrophysiology*, **1995**, 6, 115-31	2.7	72
47	A 14-3-3 mode-1 binding motif initiates gap junction internalization during acute cardiac ischemia. *Traffic*, **2014**, 15, 684-99	5.7	63
46	Dynasore protects mitochondria and improves cardiac lusitropy in Langendorff perfused mouse heart. *PLoS ONE*, **2013**, 8, e60967	3.7	61
45	Redox-sensitive sulfenic acid modification regulates surface expression of the cardiovascular voltage-gated potassium channel Kv1.5. *Circulation Research*, **2012**, 111, 842-53	15.7	60
44	Intracellular trafficking pathways of Cx43 gap junction channels. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 40-47	3.8	55
43	GJA1-20k Arranges Actin to Guide Cx43 Delivery to Cardiac Intercalated Discs. *Circulation Research*, **2017**, 121, 1069-1080	15.7	50
42	Na+ channel function, regulation, structure, trafficking and sequestration. *Journal of Physiology*, **2015**, 593, 1347-60	3.9	42
41	Cx43 Isoform GJA1-20k Promotes Microtubule Dependent Mitochondrial Transport. *Frontiers in Physiology*, **2017**, 8, 905	4.6	40
40	Stress response protein GJA1-20k promotes mitochondrial biogenesis, metabolic quiescence, and cardioprotection against ischemia/reperfusion injury. *JCI Insight*, **2018**, 3,	9.9	39
39	Plasma BIN1 correlates with heart failure and predicts arrhythmia in patients with arrhythmogenic right ventricular cardiomyopathy. *Heart Rhythm*, **2012**, 9, 961-7	6.7	38
38	Role for myosin-V motor proteins in the selective delivery of Kv channel isoforms to the membrane surface of cardiac myocytes. *Circulation Research*, **2014**, 114, 982-92	15.7	27
37	Forward trafficking of ion channels: what the clinician needs to know. *Heart Rhythm*, **2010**, 7, 1135-40	6.7	26
36	Multilayered regulation of cardiac ion channels. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2013**, 1833, 876-85	4.9	23
35	The gap junction life cycle. *Heart Rhythm*, **2012**, 9, 151-3	6.7	23
34	Validation of the Registry to Evaluate Early and Long-Term Pulmonary Arterial Hypertension Disease Management (REVEAL) pulmonary hypertension prediction model in a unique population and utility in the prediction of long-term survival. *Journal of Heart and Lung Transplantation*, **2012**, 31, 1165-70	5.8	22

33	Association of a Novel Diagnostic Biomarker, the Plasma Cardiac Bridging Integrator 1 Score, With Heart Failure With Preserved Ejection Fraction and Cardiovascular Hospitalization. *JAMA Cardiology* , **2018**, 3, 1206-1210	16.2	21
32	Connexin 43 and CaV1.2 Ion Channel Trafficking in Healthy and Diseased Myocardium. *Circulation: Arrhythmia and Electrophysiology*, **2016**, 9, e001357	6.4	19
31	Trafficking highways to the intercalated disc: new insights unlocking the specificity of connexin 43 localization. *Cell Communication and Adhesion*, **2014**, 21, 43-54		18
30	The "tail" of Connexin43: An unexpected journey from alternative translation to trafficking. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2016**, 1863, 1848-56	4.9	18
29	3-OST-7 regulates BMP-dependent cardiac contraction. *PLoS Biology*, **2013**, 11, e1001727	9.7	17
28	The ESCRT-III pathway facilitates cardiomyocyte release of cBIN1-containing microparticles. *PLoS Biology*, **2017**, 15, e2002354	9.7	17
27	Auxiliary trafficking subunit GJA1-20k protects connexin-43 from degradation and limits ventricular arrhythmias. *Journal of Clinical Investigation*, **2020**, 130, 4858-4870	15.9	16
26	Acute vincristine pretreatment protects adult mouse cardiac myocytes from oxidative stress. *Journal of Molecular and Cellular Cardiology*, **2007**, 43, 327-36	5.8	15
25	A micropatterning approach for imaging dynamic Cx43 trafficking to cell-cell borders. *FEBS Letters*, **2014**, 588, 1439-45	3.8	14
24	Performance of the REVEAL model in WHO Group 2 to 5 pulmonary hypertension: application beyond pulmonary arterial hypertension. *Journal of Heart and Lung Transplantation*, **2013**, 32, 293-8	5.8	14
23	Cardiac excitation: an interactive process of ion channels and gap junctions. *Advances in Experimental Medicine and Biology*, **1997**, 430, 269-79	3.6	12
22	Cardiomyocyte protein trafficking: Relevance to heart disease and opportunities for therapeutic intervention. *Trends in Cardiovascular Medicine*, **2015**, 25, 379-89	6.9	11
21	Rad-deletion Phenocopies Tonic Sympathetic Stimulation of the Heart. *Journal of Cardiovascular Translational Research*, **2016**, 9, 432-444	3.3	10
20	In Mice Subjected to Chronic Stress, Exogenous cBIN1 Preserves Calcium-Handling Machinery and Cardiac Function. *JACC Basic To Translational Science*, **2020**, 5, 561-578	8.7	8
19	Visualizing ion channel dynamics at the plasma membrane. *Heart Rhythm*, **2008**, 5, S7-11	6.7	8
18	An Alternatively Translated Connexin 43 Isoform, GJA1-11k, Localizes to the Nucleus and Can Inhibit Cell Cycle Progression. *Biomolecules*, **2020**, 10,	5.9	7
17	Desmosomal hotspots, microtubule delivery, and cardiac arrhythmogenesis. *Developmental Cell*, **2014**, 31, 139-40	10.2	7
16	Exogenous Cardiac Bridging Integrator 1 Benefits Mouse Hearts With Pre-existing Pressure Overload-Induced Heart Failure. *Frontiers in Physiology*, **2020**, 11, 708	4.6	6

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15	cBIN1 Score (CS) Identifies Ambulatory HFrEF Patients and Predicts Cardiovascular Events. *Frontiers in Physiology*, **2020**, 11, 503	4.6	5
14	Visualizing cardiac ion channel trafficking pathways. *Methods in Enzymology*, **2012**, 505, 187-202	1.7	5
13	Cardiac muscle is not a uniform syncytium. *Biophysical Journal*, **2010**, 98, 3102-3; discussion 3104-5	2.9	5
12	A role for connexin-43 in Duchenne muscular dystrophy cardiomyopathy. *Journal of Clinical Investigation*, **2020**, 130, 1608-1610	15.9	3
11	Protective mitochondrial fission induced by stress-responsive protein GJA1-20k. *ELife*, **2021**, 10,	8.9	2
10	Protective mitochondrial fission induced by stress responsive protein GJA1-20k		2
9	Letter by Nikolova et al Regarding Article, "Heart Failure With Preserved Ejection Fraction in Perspective". *Circulation Research*, **2019**, 125, e24-e25	15.7	1
8	GJA1-20k, an internally translated isoform of Connexin 43, is an actin capping protein		1
7	SARS-CoV-2 as an inflammatory cardiovascular disease: current knowledge and future challenges. *Future Cardiology*, **2021**, 17, 1277-1291	1.3	1
6	Association of coronary microvascular dysfunction and cardiac bridge integrator 1, a cardiomyocyte dysfunction biomarker. *Clinical Cardiology*, **2021**, 44, 1586-1593	3.3	1
5	Gap Junctions and the Spread of Electrical Excitation. *Developments in Cardiovascular Medicine*, **1998**, 125-147		1
4	GJA1-20k and Mitochondrial Dynamics.. *Frontiers in Physiology*, **2022**, 13, 867358	4.6	0
3	Ion Channel Trafficking in the Heart **2018**, 160-166		
2	Ion Channel Trafficking in the Heart **2014**, 171-178		
1	Correlating Cardiac Origin Neurohormonal Stress Levels With Heart Failure Outcomes. *JAMA Cardiology*, **2020**, 5, 326-327	16.2	