Robert A Rose

List of Publications by Year
in descending order

57	2,895	185998 28	174990 52
papers	citations	h-index	g-index

77	77	77	4253
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microbial shifts in the aging mouse gut. Microbiome, 2014, 2, 50.	4.9	354
2	A Clinical Frailty Index in Aging Mice: Comparisons With Frailty Index Data in Humans. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2014, 69, 621-632.	1.7	322
3	Bone Marrow-Derived Mesenchymal Stromal Cells Express Cardiac-Specific Markers, Retain the Stromal Phenotype, and Do Not Become Functional Cardiomyocytes In Vitro. Stem Cells, 2008, 26, 2884-2892.	1.4	202
4	Natriuretic peptide C receptor signalling in the heart and vasculature. Journal of Physiology, 2008, 586, 353-366.	1.3	175
5	RGS4 Regulates Parasympathetic Signaling and Heart Rate Control in the Sinoatrial Node. Circulation Research, 2008, 103, 527-535.	2.0	109
6	<i>Iroquois homeobox gene 3</i> establishes fast conduction in the cardiac Hisâ€"Purkinje network. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13576-13581.	3.3	109
7	The Association Between Diabetes Mellitus and Atrial Fibrillation: Clinical and Mechanistic Insights. Frontiers in Physiology, 2019, 10, 135.	1.3	88
8	Neurohumoral Control of Sinoatrial Node Activity and Heart Rate: Insight From Experimental Models and Findings From Humans. Frontiers in Physiology, 2020, 11, 170.	1.3	80
9	The natriuretic peptides BNP and CNP increase heart rate and electrical conduction by stimulating ionic currents in the sinoatrial node and atrial myocardium following activation of guanylyl cyclase-linked natriuretic peptide receptors. Journal of Molecular and Cellular Cardiology, 2012, 52, 1122-1134.	0.9	75
10	The impacts of age and frailty on heart rate and sinoatrial node function. Journal of Physiology, 2016, 594, 7105-7126.	1.3	75
11	Protecting the aged heart during cardiac surgery: Use of del Nido cardioplegia provides superior functional recovery in isolated hearts. Journal of Thoracic and Cardiovascular Surgery, 2013, 146, 940-948.	0.4	70
12	Cardiac ryanodine receptor calcium release deficiency syndrome. Science Translational Medicine, 2021, 13, .	5.8	68
13	Sex differences in SR Ca2+ release in murine ventricular myocytes are regulated by the cAMP/PKA pathway. Journal of Molecular and Cellular Cardiology, 2014, 75, 162-173.	0.9	66
14	Distinct Patterns of Constitutive Phosphodiesterase Activity in Mouse Sinoatrial Node and Atrial Myocardium. PLoS ONE, 2012, 7, e47652.	1.1	64
15	Iron Overload Decreases Ca _V 1.3-Dependent L-Type Ca ²⁺ Currents Leading to Bradycardia, Altered Electrical Conduction, and Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 733-742.	2.1	62
16	Atrial structure, function and arrhythmogenesis in aged and frail mice. Scientific Reports, 2017, 7, 44336.	1.6	55
17	Impaired sinoatrial node function and increased susceptibility to atrial fibrillation in mice lacking natriuretic peptide receptor C. Journal of Physiology, 2015, 593, 1127-1146.	1.3	54
18	Effects of C-type natriuretic peptide on ionic currents in mouse sinoatrial node: a role for the NPR-C receptor. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1970-H1977.	1.5	52

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19	Electrophysiological evidence for a gradient of G protein-gated K+ current in adult mouse atria. British Journal of Pharmacology, 2003, 140, 576-584.	2.7	51
20	Distinct patterns of atrial electrical and structural remodeling in angiotensin II mediated atrial fibrillation. Journal of Molecular and Cellular Cardiology, 2018, 124, 12-25.	0.9	51
21	NPR-C (Natriuretic Peptide Receptor-C) Modulates the Progression of Angiotensin IIâ€"Mediated Atrial Fibrillation and Atrial Remodeling in Mice. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e006863.	2.1	46
22	Electrophysiological effects of natriuretic peptides in the heart are mediated by multiple receptor subtypes. Progress in Biophysics and Molecular Biology, 2016, 120, 37-49.	1.4	40
23	Natriuretic peptides regulate heart rate and sinoatrial node function by activating multiple natriuretic peptide receptors. Journal of Molecular and Cellular Cardiology, 2012, 53, 715-724.	0.9	34
24	Intrinsic regulation of sinoatrial node function and the zebrafish as a model of stretch effects on pacemaking. Progress in Biophysics and Molecular Biology, 2017, 130, 198-211.	1.4	33
25	Loss of insulin signaling may contribute to atrial fibrillation and atrial electrical remodeling in type 1 diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7990-8000.	3.3	33
26	Altered Heart Rate and Sinoatrial Node Function in Mice Lacking the cAMP Regulator Phosphoinositide 3-Kinase-Î³. Circulation Research, 2007, 101, 1274-1282.	2.0	31
27	Altered parasympathetic nervous system regulation of the sinoatrial node in Akita diabetic mice. Journal of Molecular and Cellular Cardiology, 2015, 82, 125-135.	0.9	31
28	Effects of natriuretic peptides on electrical conduction in the sinoatrial node and atrial myocardium of the heart. Journal of Physiology, 2014, 592, 1025-1045.	1.3	30
29	Do Mesenchymal Stromal Cells Transdifferentiate Into Functional Cardiomyocytes?. Circulation Research, 2008, 103, e120.	2.0	29
30	Phosphoinositide 3-kinase Î³ Regulates Cardiac Contractility by Locally Controlling Cyclic Adenosine Monophosphate Levels. Trends in Cardiovascular Medicine, 2006, 16, 250-256.	2.3	28
31	The Impact of Ovariectomy on Calcium Homeostasis and Myofilament Calcium Sensitivity in the Aging Mouse Heart. PLoS ONE, 2013, 8, e74719.	1.1	28
32	Natriuretic Peptide Receptor-C Protects Against Angiotensin II-Mediated Sinoatrial Node Disease in Mice. JACC Basic To Translational Science, 2018, 3, 824-843.	1.9	27
33	Atrial remodeling and atrial fibrillation in acquired forms of cardiovascular disease. Heart Rhythm O2, 2020, 1, 147-159.	0.6	27
34	Effects of Wild-Type and Mutant Forms of Atrial Natriuretic Peptide on Atrial Electrophysiology and Arrhythmogenesis. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1240-1254.	2.1	26
35	New aspects of endocrine control of atrial fibrillation and possibilities for clinical translation. Cardiovascular Research, 2021, 117, 1645-1661.	1.8	24
36	The impact of ovariectomy on cardiac excitation-contraction coupling is mediated through cAMP/PKA-dependent mechanisms. Journal of Molecular and Cellular Cardiology, 2017, 111, 51-60.	0.9	23

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37	Electrical and structural remodeling contribute to atrial fibrillation in type 2 diabetic db/db mice. Heart Rhythm, 2021, 18, 118-129.	0.3	22
38	C-type Natriuretic Peptide Inhibits L-type Ca2+ Current in Rat Magnocellular Neurosecretory Cells by Activating the NPR-C Receptor. Journal of Neurophysiology, 2005, 94, 612-621.	0.9	20
39	Long-term testosterone deficiency modifies myofilament and calcium-handling proteins and promotes diastolic dysfunction in the aging mouse heart. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H768-H780.	1.5	20
40	Altered heart rate variability in angiotensin IIâ€“mediated hypertension is associated with impaired autonomic nervous system signaling and intrinsic sinoatrial node dysfunction. Heart Rhythm, 2020, 17, 1360-1370.	0.3	20
41	Intracellular [Na+] modulates synergy between Na+/Ca2+ exchanger and L-type Ca2+ current in cardiac excitationâ€“contraction coupling during action potentials. Basic Research in Cardiology, 2011, 106, 967-977.	2.5	18
42	CD-NP, a chimeric natriuretic peptide for the treatment of heart failure. Current Opinion in Investigational Drugs, 2010, 11, 349-56.	2.3	18
43	Activation of sphingosine-1-phosphate signalling as a potential underlying mechanism of the pleiotropic effects of statin therapy. Critical Reviews in Clinical Laboratory Sciences, 2013, 50, 79-89.	2.7	15
44	Ca ²⁺ Entry Through TRP-C Channels Regulates Fibroblast Biology in Chronic Atrial Fibrillation. Circulation, 2012, 126, 2039-2041.	1.6	13
45	Natriuretic peptide receptor B maintains heart rate and sinoatrial node function via cyclic GMP-mediated signalling. Cardiovascular Research, 2022, 118, 1917-1931.	1.8	13
46	Altered heart rate regulation by the autonomic nervous system in mice lacking natriuretic peptide receptor C (NPR-C). Scientific Reports, 2017, 7, 17564.	1.6	12
47	Impacts of frailty on heart rate variability in aging mice: Roles of the autonomic nervous system and sinoatrial node. Heart Rhythm, 2021, 18, 1999-2008.	0.3	10
48	New insights and new hope for pulmonary arterial hypertension: natriuretic peptides clearance receptor as a novel therapeutic target for a complex disease. International Journal of Physiology, Pathophysiology and Pharmacology, 2017, 9, 112-118.	0.8	10
49	Atrial Fibrillation in Aging and Frail Mice. Circulation: Arrhythmia and Electrophysiology, 2021, 14, e010077.	2.1	8
50	Isolation of Atrial Myocytes from Adult Mice. Journal of Visualized Experiments, 2019, , .	0.2	6
51	Distinct Effects of Ibrutinib and Acalabrutinib on Mouse Atrial and Sinoatrial Node Electrophysiology and Arrhythmogenesis. Journal of the American Heart Association, 2021, 10, e022369.	1.6	6
52	Keeping the clocks ticking as we age: changes in sinoatrial node gene expression and function in the ageing heart. Experimental Physiology, 2011, 96, 1114-1115.	0.9	4
53	Loss of Natriuretic Peptide Receptor C Enhances Sinoatrial Node Dysfunction in Aging and Frail Mice. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 902-908.	1.7	4
54	The rationale for repurposing funny current inhibition for management of ventricular arrhythmia. Heart Rhythm, 2021, 18, 130-137.	0.3	3

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55	Impaired regulation of heart rate and sinoatrial node function by the parasympathetic nervous system in type 2 diabetic mice. Scientific Reports, 2021, 11, 12465.	1.6	1
56	Mechanism of and strategy to mitigate liraglutide-mediated positive chronotropy. Life Sciences, 2021, 282, 119815.	2.0	0
57	New insights into ventricular arrhythmogenesis in aÂpure model of pulmonary arterial hypertension. Heart Rhythm, 2022, 19, 125-126.	0.3	0