Colin G Nichols

List of Publications by Year
in descending order

209 papers	16,761 citations	20817 60 h-index	17592 121 g-index
218 all docs	218 docs citations	218 times ranked	9797 citing authors

#	Article	IF	Citations
1	ATPâ€sensitive potassium channels in zebrafish cardiac and vascular smooth muscle. Journal of Physiology, 2022, 600, 299-312.	2.9	6
2	Bridging Personal and Population in Excitability Diseases: Will Studies of Rare Diseases Bring Generalizable Mechanisms From Monogenic Channelopathies?. Function, 2022, 3, zqab072.	2.3	0
3	Sulfonylurea-Insensitive Permanent Neonatal Diabetes Caused by a Severe Gain-of-Function Tyr330His Substitution in Kir6.2. Hormone Research in Paediatrics, 2022, 95, 215-223.	1.8	2
4	The T1â€tetramerization Domain of Kv1.2 Rescues Expression and Preserves Function of a Truncated NaChBac Sodium Channel. FEBS Letters, 2022, , .	2.8	0
5	Isolation of Cardiac and Vascular Smooth Muscle Cells from Adult, Juvenile, Larval and Embryonic Zebrafish for Electrophysiological Studies. Journal of Visualized Experiments, 2022, , .	0.3	0
6	ATP-Sensitive Potassium Channels in Hyperinsulinism and Type 2 Diabetes: Inconvenient Paradox or New Paradigm?. Diabetes, 2022, 71, 367-375.	0.6	5
7	Genetic Reduction of Glucose Metabolism Preserves Functional Î²-Cell Mass in KATP-Induced Neonatal Diabetes. Diabetes, 2022, 71, 1233-1245.	0.6	6
8	K_{ATP} channels in lymphatic function. American Journal of Physiology - Cell Physiology, 2022, 323, C1018-C1035.	4.6	14
9	Inward Rectifier Potassium Channels. , 2021, , 1-7.		0
10	Pore-forming transmembrane domains control ion selectivity and selectivity filter conformation in the KirBac1.1 potassium channel. Journal of General Physiology, 2021, 153, .	1.9	8
11	Complex consequences of Cantu syndrome SUR2 variant R1154Q in genetically modified mice. JCI Insight, 2021, 6, .	5.0	11
12	Consequences of SUR2[A478V] Mutation in Skeletal Muscle of Murine Model of Cantu Syndrome. Cells, 2021, 10, 1791.	4.1	10
13	Largeâ€conductance calciumâ€activated K⁺ channels, rather than K_{ATP} channels, mediate the inhibitory effects of nitric oxide on mouse lymphatic pumping. British Journal of Pharmacology, 2021, 178, 4119-4136.	5.4	13
14	Inward Rectifier Potassium Channels. , 2021, , 880-887.		0
15	Atomistic basis of opening and conduction in mammalian inward rectifier potassium (Kir2.2) channels. Journal of General Physiology, 2020, 152, jgp.201912422.	1.9	28
16	Coronavirus Proteins as Ion Channels: Current and Potential Research. Frontiers in Immunology, 2020, 11, 573339.	4.8	56
17	Macrophage secretion of miR-106b-5p causes renin-dependent hypertension. Nature Communications, 2020, 11, 4798.	12.8	36
18	The Mechanism of High-Output Cardiac Hypertrophy Arising From Potassium Channel Gain-of-Function in CantÃº Syndrome. Function, 2020, 1, zqaa004.	2.3	18

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19	Pathophysiological Consequences of KATP Channel Overactivity and Pharmacological Response to Glibenclamide in Skeletal Muscle of a Murine Model of CantÃ¹ Syndrome. Frontiers in Pharmacology, 2020, 11, 604885.	3.5	19
20	Kir6.1â€dependent K_{ATP} channels in lymphatic smooth muscle and vessel dysfunction in mice with Kir6.1 gainâ€ofâ€function. Journal of Physiology, 2020, 598, 3107-3127.	2.9	34
21	Kir6.1- and SUR2-dependent KATP overactivity disrupts intestinal motility in murine models of CantÃº syndrome. JCI Insight, 2020, 5, .	5.0	16
22	Glibenclamide reverses cardiovascular abnormalities of Cantu syndrome driven by KATP channel overactivity. Journal of Clinical Investigation, 2020, 130, 1116-1121.	8.2	40
23	Preferential Gq signaling in diabetes: an electrical switch in incretin action and in diabetes progression?. Journal of Clinical Investigation, 2020, 130, 6235-6237.	8.2	6
24	ABCC9-related Intellectual disability Myopathy Syndrome is a KATP channelopathy with loss-of-function mutations in ABCC9. Nature Communications, 2019, 10, 4457.	12.8	31
25	Pulmonary Hypertension and ATP-Sensitive Potassium Channels. Hypertension, 2019, 74, 14-22.	2.7	24
26	Betaâ€cell excitability and excitabilityâ€driven diabetes in adult Zebrafish islets. Physiological Reports, 2019, 7, e14101.	1.7	8
27	Glibenclamide treatment in a CantÃº syndrome patient with a pathogenic ABCC9 gainâ€ofâ€function variant: Initial experience. American Journal of Medical Genetics, Part A, 2019, 179, 1585-1590.	1.2	30
28	The role of membrane excitability in pancreatic Î²-cell glucotoxicity. Scientific Reports, 2019, 9, 6952.	3.3	16
29	Genetic Discovery of ATP-Sensitive K ⁺ Channels in Cardiovascular Diseases. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007322.	4.8	25
30	Potassium channel selectivity filter dynamics revealed by single-molecule FRET. Nature Chemical Biology, 2019, 15, 377-383.	8.0	30
31	CantÃº syndrome: Findings from 74 patients in the International CantÃº Syndrome Registry. American Journal of Medical Genetics, Part C: Seminars in Medical Genetics, 2019, 181, 658-681.	1.6	50
32	K ATP channels in ductus arteriosus function and pathophysiology: mechanism of action and therapeutic potential. FASEB Journal, 2019, 33, 827.14.	0.5	0
33	Cantu syndromeâ€“associated SUR2 (ABCC9) mutations in distinct structural domains result in KATP channel gain-of-function by differential mechanisms. Journal of Biological Chemistry, 2018, 293, 2041-2052.	3.4	34
34	Cryo-EM and X-ray structures of TRPV4 reveal insight into ion permeation and gating mechanisms. Nature Structural and Molecular Biology, 2018, 25, 252-260.	8.2	179
35	Studying Structural Dynamics of Potassium Channels by Single-Molecule FRET. Methods in Molecular Biology, 2018, 1684, 163-180.	0.9	13
36	In vivomonitoring of intracellular Ca²⁺dynamics in the pancreatic Î²-cells of zebrafish embryos. Islets, 2018, 10, 221-238.	1.8	11

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37	Contribution of systemic inflammation to permanence of K_{ATP}-induced neonatal diabetes in mice. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E1121-E1132.	3.5	1
38	Loss-of-Function ABCC8 Mutations in Pulmonary Arterial Hypertension. Circulation Genomic and Precision Medicine, 2018, 11, e002087.	3.6	62
39	Polyamines and potassium channels: A 25-year romance. Journal of Biological Chemistry, 2018, 293, 18779-18788.	3.4	67
40	Superior diastolic function with K ATP channel opener diazoxide in a novel mouse Langendorff model. Journal of Surgical Research, 2018, 227, 186-193.	1.6	7
41	Novel drug targets for ductus arteriosus manipulation: Looking beyond prostaglandins. Seminars in Perinatology, 2018, 42, 221-227.	2.5	11
42	Cardiovascular consequences of KATP overactivity in Cantu syndrome. JCI Insight, 2018, 3, .	5.0	44
43	Sulfonylurea challenge test in subjects diagnosed with type 1 diabetes mellitus. Pediatric Diabetes, 2017, 18, 777-784.	2.9	2
44	Clinical utility gene card for: CantÃº syndrome. European Journal of Human Genetics, 2017, 25, 512-512.	2.8	5
45	Expression and function of ATP-dependent potassium channels in zebrafish islet Î²-cells. Royal Society Open Science, 2017, 4, 160808.	2.4	13
46	Conformational changes at cytoplasmic intersubunit interactions control Kir channel gating. Journal of Biological Chemistry, 2017, 292, 10087-10096.	3.4	4
47	Control of Kir channel gating by cytoplasmic domain interface interactions. Journal of General Physiology, 2017, 149, 561-576.	1.9	18
48	Diabetes induced by gain-of-function mutations in the Kir6.1 subunit of the KATP channel. Journal of General Physiology, 2017, 149, 75-84.	1.9	13
49	Conserved functional consequences of disease-associated mutations in the slide helix of Kir6.1 and Kir6.2 subunits of the ATP-sensitive potassium channel. Journal of Biological Chemistry, 2017, 292, 17387-17398.	3.4	31
50	Transient Notch Activation Induces Long-Term Gene Expression Changes Leading to Sick Sinus Syndrome in Mice. Circulation Research, 2017, 121, 549-563.	4.5	23
51	The shifting landscape of K_{ATP}channelopathies and the need for â€˜sharperâ€™ therapeutics. Future Medicinal Chemistry, 2016, 8, 789-802.	2.3	25
52	Increased tolerance to stress in cardiac expressed gain-of-function of adenosine triphosphateâ€“sensitive potassium channel subunit Kir6.1. Journal of Surgical Research, 2016, 206, 460-465.	1.6	4
53	Structural basis of control of inward rectifier Kir2 channel gating by bulk anionic phospholipids. Journal of General Physiology, 2016, 148, 227-237.	1.9	66
54	KATP channel gain-of-function leads to increased myocardial L-type Ca2+ current and contractility in Cantu syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6773-6778.	7.1	29

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55	Neurologic and neuroimaging manifestations of CantÃº syndrome. Neurology, 2016, 87, 270-276.	1.1	40
56	Structural dynamics of potassium-channel gating revealed by single-molecule FRET. Nature Structural and Molecular Biology, 2016, 23, 31-36.	8.2	69
57	Adenosine Triphosphate-Sensitive Potassium Currents in Heart Disease and Cardioprotection. Cardiac Electrophysiology Clinics, 2016, 8, 323-335.	1.7	41
58	Novel KCNJ10 Gene Variations Compromise Function of Inwardly Rectifying Potassium Channel 4.1. Journal of Biological Chemistry, 2016, 291, 7716-7726.	3.4	15
59	Malaria parasite CelTOS targets the inner leaflet of cell membranes for pore-dependent disruption. ELife, 2016, 5, .	6.0	54
60	Role of a Hydrophobic Pocket in Polyamine Interactions with the Polyspecific Organic Cation Transporter OCT3. Journal of Biological Chemistry, 2015, 290, 27633-27643.	3.4	10
61	Modular Design of the Selectivity Filter Pore Loop in a Novel Family of Prokaryotic â€˜Inward Rectifierâ€™ (NirBac) channels. Scientific Reports, 2015, 5, 15305.	3.3	2
62	Differential mechanisms of CantÃº syndromeâ€“associated gain of function mutations in the ABCC9 (SUR2) subunit of the KATP channel. Journal of General Physiology, 2015, 146, 527-540.	1.9	33
63	Adenosine Triphosphateâ€Sensitive Potassium Channel Kir Subunits Implicated in Cardioprotection by Diazoxide. Journal of the American Heart Association, 2015, 4, e002016.	3.7	15
64	Electrophysiologic consequences of KATP gain of function in the heart: Conduction abnormalities in Cantu syndrome. Heart Rhythm, 2015, 12, 2316-2324.	0.7	18
65	Remission of Severe Neonatal Diabetes With Very Early Sulfonylurea Treatment. Diabetes Care, 2015, 38, e38-e39.	8.6	15
66	Molecular Dynamics Simulations of KirBac1.1 Mutants Reveal Global Gating Changes of Kir Channels. Journal of Chemical Information and Modeling, 2015, 55, 814-822.	5.4	21
67	Diazoxide Cardioprotection Is Independent of Adenosine Triphosphate-Sensitive Potassium Channel Kir6.1 Subunit in Response to Stress. Journal of the American College of Surgeons, 2015, 221, 319-325.	0.5	6
68	ABCC9/SUR2 in the brain: Implications for hippocampal sclerosis of aging and a potential therapeutic target. Ageing Research Reviews, 2015, 24, 111-125.	10.9	60
69	ABCC8 R1420H Loss-of-Function Variant in a Southwest American Indian Community: Association With Increased Birth Weight and Doubled Risk of Type 2 Diabetes. Diabetes, 2015, 64, 4322-4332.	0.6	50
70	Secreted CLCA1 modulates TMEM16A to activate Ca2+-dependent chloride currents in human cells. ELife, 2015, 4, .	6.0	81
71	Control of KirBac3.1 Potassium Channel Gating at the Interface between Cytoplasmic Domains. Journal of Biological Chemistry, 2014, 289, 143-151.	3.4	20
72	Direct Activation ofÎ²-Cell K_{ATP}Channels with a Novel Xanthine Derivative. Molecular Pharmacology, 2014, 85, 858-865.	2.3	34

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73	Tuning the electrical properties of the heart by differential trafficking of KATP ion channel complexes. Journal of Cell Science, 2014, 127, 2106-19.	2.0	43
74	Identification of a Cholesterol-Binding Pocket in Inward Rectifier K + (Kir) Channels. Biophysical Journal, 2014, 107, 2786-2796.	0.5	28
75	CantÃº Syndrome Resulting from Activating Mutation in theKCNJ8Gene. Human Mutation, 2014, 35, 809-813.	2.5	92
76	Pancreatic Î² Cell Dedifferentiation in Diabetes and Redifferentiation following Insulin Therapy. Cell Metabolism, 2014, 19, 872-882.	16.2	334
77	Modeling K,ATP-Dependent Excitability in Pancreatic Islets. Biophysical Journal, 2014, 107, 2016-2026.	0.5	13
78	Cardioprotective Benefits of Adenosine Triphosphate-Sensitive Potassium Channel Opener Diazoxide Are Lost with Administration after the Onset of Stress in Mouse and Human Myocytes. Journal of the American College of Surgeons, 2014, 219, 803-813.	0.5	5
79	K _{ATP} Channels and Cardiovascular Disease. Circulation Research, 2013, 112, 1059-1072.	4.5	144
80	Domain Organization of the ATP-sensitive Potassium Channel Complex Examined by Fluorescence Resonance Energy Transfer. Journal of Biological Chemistry, 2013, 288, 4378-4388.	3.4	10
81	Secondary anionic phospholipid binding site and gating mechanism in Kir2.1 inward rectifier channels. Nature Communications, 2013, 4, 2786.	12.8	60
82	Hypotension Due to Kir6.1 Gainâ€ofâ€Function in Vascular Smooth Muscle. Journal of the American Heart Association, 2013, 2, e000365.	3.7	55
83	Energetics and Location of Phosphoinositide Binding in Human Kir2.1 Channels. Journal of Biological Chemistry, 2013, 288, 16726-16737.	3.4	34
84	Differential Lipid Dependence of the Function of Bacterial Sodium Channels. PLoS ONE, 2013, 8, e61216.	2.5	18
85	Functional Characterization of a Novel KCNJ11 in Frame Mutation-Deletion Associated with Infancy-Onset Diabetes and a Mild Form of Intermediate DEND: A Battle between KATP Gain of Channel Activity and Loss of Channel Expression. PLoS ONE, 2013, 8, e63758.	2.5	16
86	Fibroblast Growth Factor Receptor 1 Signaling in Adult Cardiomyocytes Increases Contractility and Results in a Hypertrophic Cardiomyopathy. PLoS ONE, 2013, 8, e82979.	2.5	36
87	Compound heterozygous mutations in the SUR1 (ABCC 8) subunit of pancreatic KATPchannels cause neonatal diabetes by perturbing the coupling between Kir6.2 and SUR1 subunits. Channels, 2012, 6, 133-138.	2.8	11
88	On Potential Interactions between Non-selective Cation Channel TRPM4 and Sulfonylurea Receptor SUR1. Journal of Biological Chemistry, 2012, 287, 8746-8756.	3.4	28
89	Structure of a bacterial voltage-gated sodium channel pore reveals mechanisms of opening and closing. Nature Communications, 2012, 3, 1102.	12.8	255
90	The diabetic Î²â€cell: hyperstimulated vs. hyperexcited. Diabetes, Obesity and Metabolism, 2012, 14, 129-135.	4.4	29

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91	Cardiac specific ATP-sensitive K+ channel (KATP) overexpression results in embryonic lethality. Journal of Molecular and Cellular Cardiology, 2012, 53, 437-445.	1.9	12
92	Biochemistry and Physiology of the ATP-Sensitive Potassium Channel. Frontiers in Diabetes, 2012, , 7-17.	0.4	0
93	Structural rearrangements underlying ligand-gating in Kir channels. Nature Communications, 2012, 3, 617.	12.8	30
94	Block of K_v1.7 potassium currents increases glucoseâ€stimulated insulin secretion. EMBO Molecular Medicine, 2012, 4, 424-434.	6.9	42
95	Dual-Mode Phospholipid Regulation of Human Inward Rectifying Potassium Channels. Biophysical Journal, 2011, 100, 620-628.	0.5	69
96	â€œCardiac K _{ATP} â€• Circulation: Arrhythmia and Electrophysiology, 2011, 4, 796-798.	4.8	13
97	HMR 1098 is not an SUR isotype specific inhibitor of heterologous or sarcolemmal KATP channels. Journal of Molecular and Cellular Cardiology, 2011, 50, 552-560.	1.9	19
98	Effects of KATP channel openers diazoxide and pinacidil in coronary-perfused atria and ventricles from failing and non-failing human hearts. Journal of Molecular and Cellular Cardiology, 2011, 51, 215-225.	1.9	109
99	Enantioselective Protein-Sterol Interactions Mediate Regulation of Both Prokaryotic and Eukaryotic Inward Rectifier K+ Channels by Cholesterol. PLoS ONE, 2011, 6, e19393.	2.5	58
100	Defects in beta cell Ca2+ signalling, glucose metabolism and insulin secretion in a murine model of KATP channel-induced neonatal diabetes mellitus. Diabetologia, 2011, 54, 1087-1097.	6.3	30
101	Mechanism for selectivity-inactivation coupling in KcsA potassium channels. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5272-5277.	7.1	80
102	Fatty Acid Synthase Modulates Homeostatic Responses to Myocardial Stress. Journal of Biological Chemistry, 2011, 286, 30949-30961.	3.4	55
103	Congenital Hyperinsulinism and Glucose Hypersensitivity in Homozygous and Heterozygous Carriers of Kir6.2 (KCNJ11) Mutation V290M Mutation. Diabetes, 2011, 60, 209-217.	0.6	17
104	Acute Sulfonylurea Therapy at Disease Onset Can Cause Permanent Remission of KATP-Induced Diabetes. Diabetes, 2011, 60, 2515-2522.	0.6	33
105	Genes controlling postural changes in blood pressure: comprehensive association analysis of ATP-sensitive potassium channel genes KCNJ8 and ABCC9. Physiological Genomics, 2010, 40, 184-188.	2.3	8
106	Direct and Specific Activation of Human Inward Rectifier K+ Channels by Membrane Phosphatidylinositol 4,5-Bisphosphate. Journal of Biological Chemistry, 2010, 285, 37129-37132.	3.4	71
107	Locale and chemistry of spermine binding in the archetypal inward rectifier Kir2.1. Journal of General Physiology, 2010, 135, 495-508.	1.9	25
108	Lipids driving protein structure? Evolutionary adaptations in Kir channels. Channels, 2010, 4, 139-141.	2.8	16

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109	Expression and purification of recombinant human inward rectifier K+ (KCNJ) channels in Saccharomyces cerevisiae. Protein Expression and Purification, 2010, 71, 115-121.	1.3	21
110	Differential KATP channel pharmacology in intact mouse heart. Journal of Molecular and Cellular Cardiology, 2010, 48, 152-160.	1.9	84
111	Muscle K_{ATP}Channels: Recent Insights to Energy Sensing and Myoprotection. Physiological Reviews, 2010, 90, 799-829.	28.8	232
112	Kir6.2 Variant E23K Increases ATP-Sensitive K+ Channel Activity and Is Associated With Impaired Insulin Release and Enhanced Insulin Sensitivity in Adults With Normal Glucose Tolerance. Diabetes, 2009, 58, 1869-1878.	0.6	71
113	Differential Roles of Blocking Ions in KirBac1.1 Tetramer Stability. Journal of Biological Chemistry, 2009, 284, 2854-2860.	3.4	23
114	Dual role of K _{ATP} channel C-terminal motif in membrane targeting and metabolic regulation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16669-16674.	7.1	55
115	KirBac1.1: It's an Inward Rectifying Potassium Channel. Journal of General Physiology, 2009, 133, 295-305.	1.9	48
116	Molecular biology of K_{ATP} channels and implications for health and disease. IUBMB Life, 2009, 61, 971-978.	3.4	67
117	Successful sulfonylurea treatment of an insulin-naÃ¯ve neonate with diabetes mellitus due to a KCNJ11 mutation. Pediatric Diabetes, 2009, 11, 286-288.	2.9	35
118	Secondary Consequences of Î² Cell Inexcitability: Identification and Prevention in a Murine Model of KATP-Induced Neonatal Diabetes Mellitus. Cell Metabolism, 2009, 9, 140-151.	16.2	92
119	Hyperinsulinism and Diabetes: Genetic Dissection of Î² Cell Metabolism-Excitation Coupling in Mice. Cell Metabolism, 2009, 10, 442-453.	16.2	38
120	Blocker Protection by Short Spermine Analogs: Refined Mapping of the Spermine Binding Site in a Kir Channel. Biophysical Journal, 2008, 95, 3827-3839.	0.5	21
121	Disruption of Sarcolemmal ATP-Sensitive Potassium Channel Activity Impairs the Cardiac Response to Systolic Overload. Circulation Research, 2008, 103, 1009-1017.	4.5	43
122	Role of Sulfonylurea Receptor Type 1 Subunits of ATP-Sensitive Potassium Channels in Myocardial Ischemia/Reperfusion Injury. Circulation, 2008, 117, 1405-1413.	1.6	36
123	Differential Structure of Atrial and Ventricular K _{ATP}. Circulation Research, 2008, 103, 1458-1465.	4.5	118
124	The G53D Mutation in Kir6.2 (KCNJ11) Is Associated with Neonatal Diabetes and Motor Dysfunction in Adulthood that Is Improved with Sulfonylurea Therapy. Journal of Clinical Endocrinology and Metabolism, 2008, 93, 1054-1061.	3.6	100
125	Random assembly of SUR subunits in K_{ATP}channel complexes. Channels, 2008, 2, 34-38.	2.8	17
126	Chronic Antidiabetic Sulfonylureas In Vivo: Reversible Effects on Mouse Pancreatic Î²-Cells. PLoS Medicine, 2008, 5, e206.	8.4	79

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127	Alchemy in the Soup: Transforming Metabolic Signals to Excitability. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, pe59.	3.9	1
128	Polyamine Permeation and Rectification of Kir4.1 Channels. Channels, 2007, 1, 172-178.	2.8	28
129	Control of Inward Rectifier K Channel Activity by Lipid Tethering of Cytoplasmic Domains. Journal of General Physiology, 2007, 130, 329-334.	1.9	45
130	The Role of the Cytoplasmic Pore in Inward Rectification of Kir2.1 Channels. Journal of General Physiology, 2007, 130, 145-155.	1.9	43
131	A Mutation in the TMD0-L0 Region of Sulfonylurea Receptor-1 (L225P) Causes Permanent Neonatal Diabetes Mellitus (PNDM). Diabetes, 2007, 56, 1357-1362.	0.6	45
132	An ATP-Binding Mutation (G334D) in KCNJ11 Is Associated With a Sulfonylurea-Insensitive Form of Developmental Delay, Epilepsy, and Neonatal Diabetes. Diabetes, 2007, 56, 328-336.	0.6	82
133	Arrhythmia susceptibility and premature death in transgenic mice overexpressing both SUR1 and Kir6.2 [Î”N30,K185Q] in the heart. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H836-H845.	3.2	26
134	Î²â€cell hyperexcitability: from hyperinsulinism to diabetes. Diabetes, Obesity and Metabolism, 2007, 9, 81-88.	4.4	47
135	The mitochondria and insulin release: Nnt just a passing relationship. Cell Metabolism, 2006, 3, 5-7.	16.2	14
136	Expression of Kir2.1 and Kir6.2 transgenes under the control of the Î±-MHC promoter in the sinoatrial and atrioventricular nodes in transgenic mice. Journal of Molecular and Cellular Cardiology, 2006, 41, 855-867.	1.9	14
137	KATP channels as molecular sensors of cellular metabolism. Nature, 2006, 440, 470-476.	27.8	753
138	Hyperinsulinism in mice with heterozygous loss of KATP channels. Diabetologia, 2006, 49, 2368-2378.	6.3	60
139	Critical Role of Gap Junction Coupled KATP Channel Activity for Regulated Insulin Secretion. PLoS Biology, 2006, 4, e26.	5.6	117
140	The Polyamine Binding Site in Inward Rectifier K+ Channels. Journal of General Physiology, 2006, 127, 467-480.	1.9	80
141	Expression of ATP-Insensitive KATP Channels in Pancreatic Â-Cells Underlies a Spectrum of Diabetic Phenotypes. Diabetes, 2006, 55, 2957-2964.	0.6	27
142	A difference in inward rectification and polyamine block and permeation between the Kir2.1 and Kir3.1/Kir3.4 K+channels. Journal of Physiology, 2005, 568, 749-766.	2.9	13
143	Diabetes and Insulin Secretion. Diabetes, 2005, 54, 3065-3072.	0.6	146
144	Molecular Basis of Inward Rectification: Structural Features of the Blocker Defined by Extended Polyamine Analogs. Molecular Pharmacology, 2005, 68, 298-304.	2.3	19

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145	ATP and Sulfonylurea Sensitivity of Mutant ATP-Sensitive K+ Channels in Neonatal Diabetes: Implications for Pharmacogenomic Therapy. Diabetes, 2005, 54, 2645-2654.	0.6	92
146	Direct Modulation of Kir Channel Gating by Membrane Phosphatidylinositol 4,5-Bisphosphate. Journal of Biological Chemistry, 2005, 280, 35785-35788.	3.4	55
147	Sarcolemmal K channels: what do we really know?. Journal of Molecular and Cellular Cardiology, 2005, 39, 61-70.	1.9	53
148	Differential nucleotide regulation of K channels by SUR1 and SUR2A. Journal of Molecular and Cellular Cardiology, 2005, 39, 491-501.	1.9	70
149	Transgenic overexpression of SUR1 in the heart suppresses sarcolemmal K. Journal of Molecular and Cellular Cardiology, 2005, 39, 647-656.	1.9	28
150	Molecular Basis of Inward Rectification. Journal of General Physiology, 2004, 124, 541-554.	1.9	68
151	Functional Characterization of a Prokaryotic Kir Channel. Journal of Biological Chemistry, 2004, 279, 47076-47080.	3.4	52
152	Diet-Induced Glucose Intolerance in Mice With Decreased Â-Cell ATP-Sensitive K+ Channels. Diabetes, 2004, 53, 3159-3167.	0.6	42
153	Remodeling of excitation-contraction coupling in transgenic mice expressing ATP-insensitive sarcolemmal KATP channels. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1361-H1369.	3.2	39
154	Polyamine Flux in Xenopus Oocytes Through Hemiâ€Gap Junctional Channels. Journal of Physiology, 2003, 553, 95-100.	2.9	15
155	Gating Mechanism of KATP Channels. Journal of General Physiology, 2003, 122, 471-480.	1.9	81
156	HIV Protease Inhibitors Acutely Impair Glucose-Stimulated Insulin Release. Diabetes, 2003, 52, 1695-1700.	0.6	114
157	Ligand-induced Closure of Inward Rectifier Kir6.2 Channels Traps Spermine in the Pore. Journal of General Physiology, 2003, 122, 795-805.	1.9	44
158	Molecular Basis of Ion Selectivity, Block, and Rectification of the Inward Rectifier Kir3.1/Kir3.4 K+ Channel. Journal of Biological Chemistry, 2003, 278, 49537-49548.	3.4	62
159	Hyperinsulinism induced by targeted suppression of beta cell KATP channels. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16992-16997.	7.1	75
160	Structural and Functional Determinants of Conserved Lipid Interaction Domains of Inward Rectifying Kir6.2 Channels. Journal of General Physiology, 2002, 119, 581-591.	1.9	56
161	Contractility and ischemic response of hearts from transgenic mice with altered sarcolemmal KATP channels. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H584-H590.	3.2	39
162	The Role of NH2-terminal Positive Charges in the Activity of Inward Rectifier KATP Channels. Journal of General Physiology, 2002, 120, 437-446.	1.9	70

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163	K_{ATP} channels and insulin secretion disorders. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E207-E216.	3.5	98
164	Diabetes and insulin secretion: whither K_{ATP}?. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E403-E412.	3.5	36
165	ATP Interaction with the Open State of the KATP Channel. Biophysical Journal, 2001, 80, 719-728.	0.5	53
166	Sarcolemmal KATP Channels in the Heart: Molecular Mechanisms Brought to Light, but Physiologic Consequences Still in the Dark. Journal of Cardiovascular Electrophysiology, 2001, 12, 1195-1198.	1.7	12
167	Heterologous expression of the Na + ,K + â€ATPase Î³ subunit in Xenopus oocytes induces an endogenous, voltageâ€gated large diameter pore. Journal of Physiology, 2001, 535, 407-417.	2.9	24
168	Tolerance for ATP-Insensitive K ATP Channels in Transgenic Mice. Circulation Research, 2001, 89, 1022-1029.	4.5	71
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