# Wayne R Giles

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 67 papers | 2,541 citations | 270111 25 h-index | 223390 49 g-index |
| 69 all docs | 69 docs citations | 69 times ranked | 3357 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Editorial: Regulatory Mechanisms of Ca2+ Activated Ion Channels and Their Impact on Physiological/Pathophysiological Function. Frontiers in Physiology, 2022, 13, 876327. | 1.3 | 1 |
| 2 | Frequency-Dependent Properties of the Hyperpolarization-Activated Cation Current, If, in Adult Mouse Heart Primary Pacemaker Myocytes. International Journal of Molecular Sciences, 2022, 23, 4299. | 1.8 | 1 |
| 3 | A molecular complex of Ca <sub>v</sub> 1.2/CaMKK2/CaMK1a in caveolae is responsible for vascular remodeling via excitationâ€“transcription coupling. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117435119. | 3.3 | 15 |
| 4 | Arrhythmogenic influence of mutations in a myocyte-based computational model of the pulmonary vein sleeve. Scientific Reports, 2022, 12, 7040. | 1.6 | 4 |
| 5 | Machine Learned Cellular Phenotypes in Cardiomyopathy Predict Sudden Death. Circulation Research, 2021, 128, 172-184. | 2.0 | 35 |
| 6 | Swelling-activated ClC-3 activity regulates prostaglandin E2 release in human OUMS-27 chondrocytes. Biochemical and Biophysical Research Communications, 2021, 537, 29-35. | 1.0 | 7 |
| 7 | Physiological Roles of the Rapidly Activated Delayed Rectifier K+ Current in Adult Mouse Heart Primary Pacemaker Activity. International Journal of Molecular Sciences, 2021, 22, 4761. | 1.8 | 6 |
| 8 | Immediate and Delayed Response of Simulated Human Atrial Myocytes to Clinically-Relevant Hypokalemia. Frontiers in Physiology, 2021, 12, 651162. | 1.3 | 4 |
| 9 | A computational method for identifying an optimal combination of existing drugs to repair the action potentials of SQT1 ventricular myocytes. PLoS Computational Biology, 2021, 17, e1009233. | 1.5 | 5 |
| 10 | Mechanisms of flecainide induced negative inotropy: An in silico study. Journal of Molecular and Cellular Cardiology, 2021, 158, 26-37. | 0.9 | 2 |
| 11 | The T-type Calcium Channel Cav3.1 in Y79 Retinoblastoma Cells is Regulated by the Epidermal Growth Factor Receptor via the MAPK Signaling Pathway. Current Eye Research, 2021, , 1-10. | 0.7 | 3 |
| 12 | Roles of LRRC26 as an auxiliary Î³1-subunit of large-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channels in bronchial smooth muscle cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L366-L375. | 1.3 | 7 |
| 13 | Populations of in silico myocytes and tissues reveal synergy of multiatrialâ€predominant K<sup>+</sup>â€current block in atrial fibrillation. British Journal of Pharmacology, 2020, 177, 4497-4515. | 2.7 | 23 |
| 14 | Computational translation of drug effects from animal experiments to human ventricular myocytes. Scientific Reports, 2020, 10, 10537. | 1.6 | 9 |
| 15 | Physiological Effects of the Electrogenic Current Generated by the Na<sup>+</sup>/K<sup>+</sup>Pump in Mammalian Articular Chondrocytes. Bioelectricity, 2020, 2, 258-268. | 0.6 | 6 |
| 16 | K+ and Ca2+ Channels Regulate Ca2+ Signaling in Chondrocytes: An Illustrated Review. Cells, 2020, 9, 1577. | 1.8 | 16 |
| 17 | Transient outward K<sup>+</sup> current can strongly modulate action potential duration and initiate alternans in the human atrium. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H527-H542. | 1.5 | 20 |
| 18 | ATP increases [Ca<sup>2+</sup>]<sub>i</sub> and activates a Ca<sup>2+</sup>â€dependent Cl<sup>â^’</sup> current in rat ventricular fibroblasts. Experimental Physiology, 2018, 103, 666-682. | 0.9 | 1 |

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|---|---|---|---|
| 19 | Pro-arrhythmic effects of low plasma [K + ] in human ventricle: An illustrated review. Trends in Cardiovascular Medicine, 2018, 28, 233-242. | 2.3 | 16 |
| 20 | The Resting Potential and K+ Currents in Primary Human Articular Chondrocytes. Frontiers in Physiology, 2018, 9, 974. | 1.3 | 7 |
| 21 | Hypoxic stress upregulates K<sub>ir</sub>2.1 expression by a pathway including hypoxic-inducible factor-1Î± and dynamin2 in brain capillary endothelial cells. American Journal of Physiology - Cell Physiology, 2018, 315, C202-C213. | 2.1 | 10 |
| 22 | HIF-1Î±-dynamin2-Kir2.1 pathway contributes to cell proliferation in brain capillary endothelial cells under hypoxic stress. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO1-2-25. | 0.0 | 0 |
| 23 | Identification of a new splice variant of largeâ€conductance Ca 2+ â€activated K + (BK) channel Î± subunit from human chondrocyte. FASEB Journal, 2018, 32, 750.27. | 0.2 | 0 |
| 24 | A Mathematical Model of Plasma Membrane Electrophysiology of a Brain Capillary Pericyte: Investigating Pericyte Contribution to the Electrical Properties of the Capillary Network. FASEB Journal, 2018, 32, 712.10. | 0.2 | 0 |
| 25 | Ventricular Microanatomy, Arrhythmias, and the Electrochemical Driving Force for Na +. Circulation: Arrhythmia and Electrophysiology, 2017, 10, e004955. | 2.1 | 0 |
| 26 | No fuzzy space for intracellular Na+ in healthy ventricular myocytes. Journal of General Physiology, 2017, 149, 683-687. | 0.9 | 3 |
| 27 | Cardiac action potential repolarization revisited: early repolarization shows allâ€orâ€none behaviour. Journal of Physiology, 2017, 595, 6599-6612. | 1.3 | 23 |
| 28 | Synergistic Anti-arrhythmic Effects in Human Atria with Combined Use of Sodium Blockers and Acacetin. Frontiers in Physiology, 2017, 8, 946. | 1.3 | 58 |
| 29 | Rigorous Phenotyping of Cardiac iPSC Preparations Requires Knowledge of Their Resting Potential(s). Biophysical Journal, 2016, 110, 278-280. | 0.2 | 19 |
| 30 | A computational model predicts adjunctive pharmacotherapy for cardiac safety via selective inhibition of the late cardiac Na current. Journal of Molecular and Cellular Cardiology, 2016, 99, 151-161. | 0.9 | 22 |
| 31 | A New Splice Variant of Large Conductance Ca2+-activated K+ (BK) Channel Î± Subunit Alters Human Chondrocyte Function. Journal of Biological Chemistry, 2016, 291, 24247-24260. | 1.6 | 22 |
| 32 | Editorial commentary: This sodium current may be late, but it is important. Trends in Cardiovascular Medicine, 2016, 26, 123-125. | 2.3 | 6 |
| 33 | Changes in Intracellular Na+ following Enhancement of Late Na+ Current in Virtual Human Ventricular Myocytes. PLoS ONE, 2016, 11, e0167060. | 1.1 | 7 |
| 34 | Cardiac late Na+ current: Proarrhythmic effects, roles in long QT syndromes, and pathological relationship to CaMKII and oxidative stress. Heart Rhythm, 2015, 12, 440-448. | 0.3 | 125 |
| 35 | Orai1â€“Orai2 complex is involved in store-operated calcium entry in chondrocyte cell lines. Cell Calcium, 2015, 57, 337-347. | 1.1 | 41 |
| 36 | A computational modelling approach combined with cellular electrophysiology data provides insights into the therapeutic benefit of targeting the late Na<sup>+</sup> current. Journal of Physiology, 2015, 593, 1429-1442. | 1.3 | 22 |

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|---|---|---|---|
| 37 | David Yue (1957â€“2014). Journal of Physiology, 2015, 593, 1325-1325. | 1.3 | 0 |
| 38 | The ClC-7 Chloride Channel Is Downregulated by Hypoosmotic Stress in Human Chondrocytes. Molecular Pharmacology, 2015, 88, 113-120. | 1.0 | 29 |
| 39 | Na+ current expression in human atrial myofibroblasts: identity and functional roles. Frontiers in Physiology, 2014, 5, 275. | 1.3 | 28 |
| 40 | In silico assessment of drug safety in human heart applied to late sodium current blockers. Channels, 2013, 7, 249-262. | 1.5 | 27 |
| 41 | Ca <sup>2+</sup> Entry Through TRP-C Channels Regulates Fibroblast Biology in Chronic Atrial Fibrillation. Circulation, 2012, 126, 2039-2041. | 1.6 | 13 |
| 42 | Twoâ€pore domain K<sup>+</sup> channels regulate membrane potential of isolated human articular chondrocytes. Journal of Physiology, 2011, 589, 5071-5089. | 1.3 | 29 |
| 43 | Repolarization of the mammalian heart action potential is modulated by changes in osmotic strength. Cardiovascular Research, 2011, 91, 376-377. | 1.8 | 0 |
| 44 | Measurement of the membrane potential in small cells using patch clamp methods. Channels, 2011, 5, 530-537. | 1.5 | 33 |
| 45 | Ionic mechanisms of electrophysiological properties and repolarization abnormalities in rabbit Purkinje fibers. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1806-H1813. | 1.5 | 55 |
| 46 | Voltage-gated K+currents in mouse articular chondrocytes regulate membrane potential. Channels, 2010, 4, 179-191. | 1.5 | 24 |
| 47 | Effects of Applied Stretch on Native and Recombinant Cardiac Na+ Currents. , 2010, , 169-184. | | 1 |
| 48 | Electrotonic Coupling between Human Atrial Myocytes and Fibroblasts Alters Myocyte Excitability and Repolarization. Biophysical Journal, 2009, 97, 2179-2190. | 0.2 | 122 |
| 49 | Natriuretic peptide C receptor signalling in the heart and vasculature. Journal of Physiology, 2008, 586, 353-366. | 1.3 | 175 |
| 50 | Contributions of HERG <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si92.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi mathvariant="normal">K</mml:mi></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math> current to repolarization of the human ventricular action potential. Progress in Biophysics and Molecular Biology, 2008, 96, 357-376. | 1.4 | 70 |
| 51 | Mathematical simulations of ligand-gated and cell-type specific effects on the action potential of human atrium. Progress in Biophysics and Molecular Biology, 2008, 98, 161-170. | 1.4 | 59 |
| 52 | Spatial distributions of Kv4 channels and KChip2 isoforms in the murine heart based on laser capture microdissection. Cardiovascular Research, 2007, 73, 739-749. | 1.8 | 35 |
| 53 | A Mathematical Model of Electrotonic Interactions between Ventricular Myocytes and Fibroblasts. Biophysical Journal, 2007, 92, 4121-4132. | 0.2 | 203 |
| 54 | Evidence of intercellular coupling between co-cultured adult rabbit ventricular myocytes and myofibroblasts. Journal of Physiology, 2007, 583, 225-236. | 1.3 | 129 |

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|---|---|---|---|
| 55 | Hyposmotic Challenge Inhibits Inward Rectifying K + Channels in Cerebral Arterial Smooth Muscle Cells. FASEB Journal, 2007, 21, A520. | 0.2 | 0 |
| 56 | Cardiac fibroblasts: friend or foe?. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H1015-H1026. | 1.5 | 367 |
| 57 | Contributions of inwardly rectifying K + currents to repolarization assessed using mathematical models of human ventricular myocytes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1207-1222. | 1.6 | 33 |
| 58 | Comparison of contraction and calcium handling between right and left ventricular myocytes from adult mouse heart: a role for repolarization waveform. Journal of Physiology, 2006, 571, 131-146. | 1.3 | 99 |
| 59 | K+ Currents Activated by Depolarization in Cardiac Fibroblasts. Biophysical Journal, 2005, 88, 3924-3935. | 0.2 | 76 |
| 60 | A rapidly activating delayed rectifier K+ current regulates pacemaker activity in adult mouse sinoatrial node cells. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1757-H1766. | 1.5 | 74 |
| 61 | Changes in extracellular K+concentration modulate contractility of rat and rabbit cardiac myocytes via the inward rectifier K+currentIK1. Journal of Physiology, 2004, 556, 773-790. | 1.3 | 44 |
| 62 | 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 |
| 63 | Resting Membrane Potential Regulates Na + â€“Ca 2+ Exchangeâ€Mediated Ca 2+ Overload during Hypoxiaâ€“Reoxygenation in Rat Ventricular Myocytes. Journal of Physiology, 2003, 550, 889-898. | 1.3 | 58 |
| 64 | Mathematical Model of the Rapidly Activating Delayed Rectifier Potassium Current IKr in Rabbit Sinoatrial Node. Journal of Cardiovascular Electrophysiology, 2002, 13, 1131-1140. | 0.8 | 16 |
| 65 | Parasympathetic modulation of sinoatrial node pacemaker activity in rabbit heart: a unifying model. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H2221-H2244. | 1.5 | 69 |
| 66 | The isolated working mouse heart: methodological considerations. Pflugers Archiv European Journal of Physiology, 1999, 437, 979-985. | 1.3 | 55 |
| 67 | A model of stimulus frequency effects on the rabbit atrial myocyte. , 1992, , . | | 0 |