

Robert Brenner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2891509/publications.pdf>

Version: 2024-02-01

58
papers

4,179
citations

257450

24
h-index

214800

47
g-index

59
all docs

59
docs citations

59
times ranked

3167
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Vasoregulation by the β_1 subunit of the calcium-activated potassium channel. <i>Nature</i> , 2000, 407, 870-876. | 27.8 | 772 |
| 2 | Sequence and Expression of mRNAs Encoding the β_1 and β_2 Subunits of a DHP-Sensitive Calcium Channel. <i>Science</i> , 1988, 241, 1661-1664. | 12.6 | 565 |
| 3 | Structure and functional expression of β_1 , β_2 , and β_3 subunits of a novel human neuronal calcium channel subtype. <i>Neuron</i> , 1992, 8, 71-84. | 8.1 | 513 |
| 4 | Cloning and Functional Characterization of Novel Large Conductance Calcium-activated Potassium Channel β Subunits, hKCNMB3 and hKCNMB4. <i>Journal of Biological Chemistry</i> , 2000, 275, 6453-6461. | 3.4 | 434 |
| 5 | BK channel β_4 subunit reduces dentate gyrus excitability and protects against temporal lobe seizures. <i>Nature Neuroscience</i> , 2005, 8, 1752-1759. | 14.8 | 321 |
| 6 | Nanoparticle delivery of CRISPR into the brain rescues a mouse model of fragile X syndrome from exaggerated repetitive behaviours. <i>Nature Biomedical Engineering</i> , 2018, 2, 497-507. | 22.5 | 277 |
| 7 | β_1 subunit of the Ca^{2+} -activated K^+ channel regulates contractile activity of mouse urinary bladder smooth muscle. <i>Journal of Physiology</i> , 2001, 537, 443-452. | 2.9 | 134 |
| 8 | Mechanism of β_4 Subunit Modulation of BK Channels. <i>Journal of General Physiology</i> , 2006, 127, 449-465. | 1.9 | 99 |
| 9 | Mechanism of Increased BK Channel Activation from a Channel Mutation that Causes Epilepsy. <i>Journal of General Physiology</i> , 2009, 133, 283-294. | 1.9 | 70 |
| 10 | Identification and localization of BK- β subunits in the distal nephron of the mouse kidney. <i>American Journal of Physiology - Renal Physiology</i> , 2007, 293, F350-F359. | 2.7 | 66 |
| 11 | An african-specific functional polymorphism in KCNMB1 shows sex-specific association with asthma severity. <i>Human Molecular Genetics</i> , 2008, 17, 2681-2690. | 2.9 | 64 |
| 12 | Tissue-specific expression of a Drosophila calcium-activated potassium channel. <i>Journal of Neuroscience</i> , 1995, 15, 6250-6259. | 3.6 | 58 |
| 13 | Shaping of action potentials by type I and type II large-conductance Ca^{2+} -activated K^+ channels. <i>Neuroscience</i> , 2011, 192, 205-218. | 2.3 | 56 |
| 14 | The Brain-Specific Beta4 Subunit Downregulates BK Channel Cell Surface Expression. <i>PLoS ONE</i> , 2012, 7, e33429. | 2.5 | 54 |
| 15 | Vasoregulation at the Molecular Level A Role for the β_1 Subunit of the Calcium-Activated Potassium (BK) Channel. <i>Trends in Cardiovascular Medicine</i> , 2002, 12, 78-82. | 4.9 | 52 |
| 16 | Molecular Separation of Two Behavioral Phenotypes by a Mutation Affecting the Promoters of a Ca-Activated K Channel. <i>Journal of Neuroscience</i> , 2000, 20, 2988-2993. | 3.6 | 45 |
| 17 | BK channel β_1 -subunit regulation of calcium handling and constriction in tracheal smooth muscle. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2006, 291, L802-L810. | 2.9 | 45 |
| 18 | An S6 Mutation in BK Channels Reveals β_1 Subunit Effects on Intrinsic and Voltage-dependent Gating. <i>Journal of General Physiology</i> , 2006, 128, 731-744. | 1.9 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Current understanding of iberiotoxin-resistant BK channels in the nervous system. <i>Frontiers in Physiology</i> , 2014, 5, 382. | 2.8 | 42 |
| 20 | A Mouse Model of Repetitive Blast Traumatic Brain Injury Reveals Post-Trauma Seizures and Increased Neuronal Excitability. <i>Journal of Neurotrauma</i> , 2020, 37, 248-261. | 3.4 | 38 |
| 21 | Prevention of brain damage after traumatic brain injury by pharmacological enhancement of KCNQ (Kv7, α M-type) K^{+} currents in neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020, 40, 1256-1273. | 4.3 | 37 |
| 22 | Regulation of STREX exon large conductance, calcium-activated potassium channels by the β 4 accessory subunit. <i>Neuroscience</i> , 2007, 149, 789-803. | 2.3 | 36 |
| 23 | Knockout of the BK β 4-subunit promotes a functional coupling of BK channels and ryanodine receptors that mediate a fAHP-induced increase in excitability. <i>Journal of Neurophysiology</i> , 2016, 116, 456-465. | 1.8 | 35 |
| 24 | BK channel β 1 subunits regulate airway contraction secondary to M2 muscarinic acetylcholine receptor mediated depolarization. <i>Journal of Physiology</i> , 2011, 589, 1803-1817. | 2.9 | 32 |
| 25 | Complementation of Physiological and Behavioral Defects by a Slowpoke Ca^{2+} -Activated K^{+} Channel Transgene. <i>Journal of Neurochemistry</i> , 2002, 75, 1310-1319. | 3.9 | 25 |
| 26 | Functional effects of KCNQ K^{+} channels in airway smooth muscle. <i>Frontiers in Physiology</i> , 2013, 4, 277. | 2.8 | 23 |
| 27 | Downregulation of KCNMB4 expression and changes in BK channel subtype in hippocampal granule neurons following seizure activity. <i>PLoS ONE</i> , 2017, 12, e0188064. | 2.5 | 21 |
| 28 | Calcium-Activated Potassium Channel Gene Expression in the Midgut of <i>Drosophila</i> . <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1997, 118, 411-420. | 1.6 | 20 |
| 29 | Modulation by the BK accessory β 4 subunit of phosphorylation-dependent changes in excitability of dentate gyrus granule neurons. <i>European Journal of Neuroscience</i> , 2011, 34, 695-704. | 2.6 | 20 |
| 30 | Developmental- and Eye-Specific Transcriptional Control Elements in an Intronic Region of a Ca^{2+} -Activated K^{+} Channel Gene. <i>Developmental Biology</i> , 1996, 177, 536-543. | 2.0 | 19 |
| 31 | Behavioral and Electrophysiological Analysis of Ca -activated K -channel Transgenes in <i>Drosophila</i> . <i>Annals of the New York Academy of Sciences</i> , 1998, 860, 296-305. | 3.8 | 19 |
| 32 | A computational model for how the fast afterhyperpolarization paradoxically increases gain in regularly firing neurons. <i>Journal of Neurophysiology</i> , 2018, 119, 1506-1520. | 1.8 | 17 |
| 33 | Cataract-associated connexin 46 mutation alters its interaction with calmodulin and function of hemichannels. <i>Journal of Biological Chemistry</i> , 2018, 293, 2573-2585. | 3.4 | 16 |
| 34 | <i>In vitro</i> Measurements of Tracheal Constriction Using Mice. <i>Journal of Visualized Experiments</i> , 2012, , . | 0.3 | 12 |
| 35 | Neuroprotective Roles of the Adenosine A3 Receptor Agonist AST-004 in Mouse Model of Traumatic Brain Injury. <i>Neurotherapeutics</i> , 2021, 18, 2707-2721. | 4.4 | 12 |
| 36 | Potassium Channelopathies of Epilepsy. , 2012, , 688-701. | | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Î²1-Subunit of the calcium-sensitive potassium channel modulates the pulmonary vascular smooth muscle cell response to hypoxia. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 315, L265-L275. | 2.9 | 10 |
| 38 | Novel embryonic regulation of Ca ²⁺ -activated K ⁺ channel expression in Drosophila. Invertebrate Neuroscience, 1997, 2, 283-291. | 1.8 | 9 |
| 39 | Mechanisms associated with the antidepressant-like effects of L-655,708. Neuropsychopharmacology, 2020, 45, 2289-2298. | 5.4 | 9 |
| 40 | Knockout of the BK Î²2 subunit reveals the importance of accessorizing your channel. Journal of General Physiology, 2014, 144, 351-356. | 1.9 | 8 |
| 41 | Hydraulically coupled microejection technique for precise local solution delivery in tissues. Journal of Neuroscience Methods, 2006, 155, 231-240. | 2.5 | 7 |
| 42 | Performance of a clay-alum flocculation (CCBA) process for virus removal from municipal wastewater. Water Research, 1988, 22, 1449-1454. | 11.3 | 6 |
| 43 | Bis-Quinolinium Cyclophane Blockers of SK Potassium Channels Are Antagonists of M3 Muscarinic Acetylcholine Receptors. Frontiers in Pharmacology, 2020, 11, 552211. | 3.5 | 4 |
| 44 | Potassium channelopathies of epilepsy. Epilepsia, 2010, 51, 60-60. | 5.1 | 3 |
| 45 | Voltage effects on muscarinic acetylcholine receptor-mediated contractions of airway smooth muscle. Physiological Reports, 2018, 6, e13856. | 1.7 | 3 |
| 46 | Effects of Sublethal Organophosphate Toxicity and Anti-cholinergics on Electroencephalogram and Respiratory Mechanics in Mice. Frontiers in Neuroscience, 2022, 16, 866899. | 2.8 | 3 |
| 47 | Integrated Wastewater Treatment Using Artificial Wetlands: A Gravel Marsh Case Study. , 2020, , 145-152. | | 2 |
| 48 | Assessment of Airway Hyperresponsiveness in Murine Tracheal Rings. Methods in Molecular Biology, 2013, 1032, 257-269. | 0.9 | 2 |
| 49 | Dequalinium chloride is an antagonists of Î±7 nicotinic acetylcholine receptors. European Journal of Pharmacology, 2022, 925, 175000. | 3.5 | 2 |
| 50 | ION CHANNELS Proepileptic Effects of BK Channel Gene Mutations. , 2009, , 662-669. | | 1 |
| 51 | Mechanism Of Increased Bk Channel Activation From A Channel Mutation That Causes Epilepsy. Biophysical Journal, 2009, 96, 381a. | 0.5 | 0 |
| 52 | Structure-Function Studies of the Large Conductance Voltage-and Calcium-Activated Potassium Channel BETA1 Auxiliary Subunit. Biophysical Journal, 2011, 100, 583a. | 0.5 | 0 |
| 53 | BK Channels Regulate Contraction Secondary to M2 Muscarinic Acetylcholine Receptor Mediated Depolarization. Biophysical Journal, 2011, 100, 289a. | 0.5 | 0 |
| 54 | Regulation of Airway Smooth Muscle Contraction by KV7 (M-Type) K ⁺ Channels. Biophysical Journal, 2012, 102, 678a. | 0.5 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Kcnq Channels in Airway Smooth Muscle. Biophysical Journal, 2013, 104, 269a. | 0.5 | 0 |
| 56 | SK Potassium Channel Antagonists As Novel Bronchodilators. Journal of Allergy and Clinical Immunology, 2016, 137, AB190. | 2.9 | 0 |
| 57 | Novel Drugs that Augment KCNQ (KV7, "M-Type") Potassium Channels as a Post-Event Treatment for Traumatic Brain Injury. Biophysical Journal, 2018, 114, 309a. | 0.5 | 0 |
| 58 | BK Potassium Channel Mutations Affecting Neuronal Function and Epilepsy. Neuromethods, 2009, , 87-106. | 0.3 | 0 |