

# Harald Sontheimer

## List of Publications by Citations

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200  
papers

16,566  
citations

76  
h-index

124  
g-index

215  
ext. papers

18,520  
ext. citations

7.4  
avg, IF

6.89  
L-index

#	Paper	IF	Citations
200	Importance of a novel GABAA receptor subunit for benzodiazepine pharmacology. <i>Nature</i> , <b>1989</b> , 338, 582-5	50.4	1203
199	Two novel GABAA receptor subunits exist in distinct neuronal subpopulations. <i>Neuron</i> , <b>1989</b> , 3, 327-37	13.9	503
198	A neurocentric perspective on glioma invasion. <i>Nature Reviews Neuroscience</i> , <b>2014</b> , 15, 455-65	13.5	446
197	Disruption of astrocyte-vascular coupling and the blood-brain barrier by invading glioma cells. <i>Nature Communications</i> , <b>2014</b> , 5, 4196	17.4	309
196	Reactive astrocyte nomenclature, definitions, and future directions. <i>Nature Neuroscience</i> , <b>2021</b> , 24, 312-325	33.5	298
195	Glioma cells release excitotoxic concentrations of glutamate. <i>Cancer Research</i> , <b>1999</b> , 59, 4383-91	10.1	296
194	Glutamate release by primary brain tumors induces epileptic activity. <i>Nature Medicine</i> , <b>2011</b> , 17, 1269-74	50.5	292
193	Chlorotoxin inhibits glioma cell invasion via matrix metalloproteinase-2. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 4135-44	5.4	287
192	Compromised glutamate transport in human glioma cells: reduction-mislocalization of sodium-dependent glutamate transporters and enhanced activity of cystine-glutamate exchange. <i>Journal of Neuroscience</i> , <b>1999</b> , 19, 10767-77	6.6	273
191	Modulation of glioma cell migration and invasion using Cl(-) and K(+) ion channel blockers. <i>Journal of Neuroscience</i> , <b>1999</b> , 19, 5942-54	6.6	255
190	Inhibition of cystine uptake disrupts the growth of primary brain tumors. <i>Journal of Neuroscience</i> , <b>2005</b> , 25, 7101-10	6.6	246
189	Autocrine glutamate signaling promotes glioma cell invasion. <i>Cancer Research</i> , <b>2007</b> , 67, 9463-71	10.1	238
188	Voltage-dependent ion channels in glial cells. <i>Glia</i> , <b>1994</b> , 11, 156-72	9	236
187	Channel expression correlates with differentiation stage during the development of oligodendrocytes from their precursor cells in culture. <i>Neuron</i> , <b>1989</b> , 2, 1135-45	13.9	235
186	Properties of human glial cells associated with epileptic seizure foci. <i>Epilepsy Research</i> , <b>1998</b> , 32, 286-303		224
185	Functional implications for Kir4.1 channels in glial biology: from K+ buffering to cell differentiation. <i>Journal of Neurochemistry</i> , <b>2008</b> , 107, 589-601	6	224
184	Transient expression shows ligand gating and allosteric potentiation of GABAA receptor subunits. <i>Science</i> , <b>1988</b> , 242, 1306-8	33.3	224

183	Chlorotoxin, a scorpion-derived peptide, specifically binds to gliomas and tumors of neuroectodermal origin. <i>Glia</i> , <b>2002</b> , 39, 162-73	9	204
182	Glutamate and the biology of gliomas. <i>Glia</i> , <b>2011</b> , 59, 1181-9	9	185
181	Glutamate opens Na <sup>+</sup> /K <sup>+</sup> channels in cultured astrocytes. <i>Glia</i> , <b>1988</b> , 1, 328-36	9	184
180	Biophysical and pharmacological characterization of inwardly rectifying K <sup>+</sup> currents in rat spinal cord astrocytes. <i>Journal of Neurophysiology</i> , <b>1995</b> , 73, 333-46	3.2	180
179	Cytokine modulation of glial glutamate uptake: a possible involvement of nitric oxide. <i>NeuroReport</i> , <b>1996</b> , 7, 2181-5	1.7	179
178	An unexpected role for ion channels in brain tumor metastasis. <i>Experimental Biology and Medicine</i> , <b>2008</b> , 233, 779-91	3.7	175
177	Reactive astrogliosis causes the development of spontaneous seizures. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 3330-45	6.6	171
176	Functional chloride channels by mammalian cell expression of rat glycine receptor subunit. <i>Neuron</i> , <b>1989</b> , 2, 1491-7	13.9	161
175	Volume-activated chloride currents contribute to the resting conductance and invasive migration of human glioma cells. <i>Journal of Neuroscience</i> , <b>2001</b> , 21, 7674-83	6.6	160
174	Activity-dependent extracellular K <sup>+</sup> accumulation in rat optic nerve: the role of glial and axonal Na <sup>+</sup> pumps. <i>Journal of Physiology</i> , <b>2000</b> , 522 Pt 3, 427-42	3.9	156
173	Use of chlorotoxin for targeting of primary brain tumors. <i>Cancer Research</i> , <b>1998</b> , 58, 4871-9	10.1	149
172	A role for ion channels in glioma cell invasion. <i>Neuron Glia Biology</i> , <b>2006</b> , 2, 39-49		147
171	Postnatal development of ionic currents in rat hippocampal astrocytes in situ. <i>Journal of Neurophysiology</i> , <b>1997</b> , 78, 461-77	3.2	141
170	A role for glutamate in growth and invasion of primary brain tumors. <i>Journal of Neurochemistry</i> , <b>2008</b> , 105, 287-95	6	138
169	SLC7A11 expression is associated with seizures and predicts poor survival in patients with malignant glioma. <i>Science Translational Medicine</i> , <b>2015</b> , 7, 289ra86	17.5	137
168	Changes in ion channel expression accompany cell cycle progression of spinal cord astrocytes. <i>Glia</i> , <b>2000</b> , 30, 39-48	9	136
167	Bradykinin promotes the chemotactic invasion of primary brain tumors. <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 4858-67	6.6	132
166	Expression and function of water channels (aquaporins) in migrating malignant astrocytes. <i>Glia</i> , <b>2007</b> , 55, 1034-43	9	132

165	Expression of voltage-gated chloride channels in human glioma cells. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 5572-82	6.6	131
164	Neuron-glia interactions in the pathophysiology of epilepsy. <i>Nature Reviews Neuroscience</i> , <b>2019</b> , 20, 282-297	3.7	126
163	Astrocyte Na <sup>+</sup> channels are required for maintenance of Na <sup>+</sup> /K <sup>+</sup> -ATPase activity. <i>Journal of Neuroscience</i> , <b>1994</b> , 14, 2464-75	6.6	125
162	Cloning and characterization of glioma BK, a novel BK channel isoform highly expressed in human glioma cells. <i>Journal of Neuroscience</i> , <b>2002</b> , 22, 1840-9	6.6	124
161	Reduced expression of connexin-43 and functional gap junction coupling in human gliomas. <i>Glia</i> , <b>2001</b> , 33, 107-17	9	124
160	Electrophysiological characteristics of reactive astrocytes in experimental cortical dysplasia. <i>Journal of Neurophysiology</i> , <b>2001</b> , 85, 1719-31	3.2	124
159	Glia as drivers of abnormal neuronal activity. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 28-33	25.5	120
158	Ion channels and transporters [corrected] in cancer. 2. Ion channels and the control of cancer cell migration. <i>American Journal of Physiology - Cell Physiology</i> , <b>2011</b> , 301, C541-9	5.4	120
157	Expression and function of calcium-activated potassium channels in human glioma cells. <i>Glia</i> , <b>2006</b> , 54, 223-33	9	120
156	Expression of voltage-activated ion channels by astrocytes and oligodendrocytes in the hippocampal slice. <i>Journal of Neurophysiology</i> , <b>1993</b> , 70, 1863-73	3.2	118
155	Astrocytes exhibit regional specificity in gap-junction coupling. <i>Glia</i> , <b>1994</b> , 11, 315-25	9	116
154	Human epileptic astrocytes exhibit increased gap junction coupling. <i>Glia</i> , <b>1995</b> , 15, 195-202	9	115
153	Electrophysiological changes that accompany reactive gliosis in vitro. <i>Journal of Neuroscience</i> , <b>1997</b> , 17, 7316-29	6.6	112
152	Ion channels in spinal cord astrocytes in vitro. I. Transient expression of high levels of Na <sup>+</sup> and K <sup>+</sup> channels. <i>Journal of Neurophysiology</i> , <b>1992</b> , 68, 985-1000	3.2	111
151	Voltage-gated Na <sup>+</sup> channels in glia: properties and possible functions. <i>Trends in Neurosciences</i> , <b>1996</b> , 19, 325-31	13.3	107
150	Chloride accumulation drives volume dynamics underlying cell proliferation and migration. <i>Journal of Neurophysiology</i> , <b>2009</b> , 101, 750-7	3.2	103
149	BK channels in human glioma cells. <i>Journal of Neurophysiology</i> , <b>2001</b> , 85, 790-803	3.2	102
148	Ion channels in spinal cord astrocytes in vitro. II. Biophysical and pharmacological analysis of two Na <sup>+</sup> current types. <i>Journal of Neurophysiology</i> , <b>1992</b> , 68, 1001-11	3.2	102

147	Malignant gliomas: perverting glutamate and ion homeostasis for selective advantage. <i>Trends in Neurosciences</i> , <b>2003</b> , 26, 543-9	13.3	101
146	Anion channels in astrocytes: biophysics, pharmacology, and function. <i>Glia</i> , <b>2006</b> , 54, 747-57	9	100
145	Na(+)-current expression in rat hippocampal astrocytes in vitro: alterations during development. <i>Journal of Neurophysiology</i> , <b>1991</b> , 65, 3-19	3.2	99
144	Hydrodynamic cellular volume changes enable glioma cell invasion. <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 17250-9	6.6	97
143	Molecular interaction and functional regulation of ClC-3 by Ca <sup>2+</sup> /calmodulin-dependent protein kinase II (CaMKII) in human malignant glioma. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 11188-96	5.4	96
142	Role for calcium-activated potassium channels (BK) in growth control of human malignant glioma cells. <i>Journal of Neuroscience Research</i> , <b>2004</b> , 78, 224-34	4.4	95
141	Transient receptor potential canonical channels are essential for chemotactic migration of human malignant gliomas. <i>Journal of Cellular Physiology</i> , <b>2011</b> , 226, 1879-88	7	93
140	Inhibition of the Sodium-Potassium-Chloride Cotransporter Isoform-1 reduces glioma invasion. <i>Cancer Research</i> , <b>2010</b> , 70, 5597-606	10.1	93
139	Cell cycle-dependent expression of a glioma-specific chloride current: proposed link to cytoskeletal changes. <i>American Journal of Physiology - Cell Physiology</i> , <b>1997</b> , 273, C1290-7	5.4	93
138	ClC3 is a critical regulator of the cell cycle in normal and malignant glial cells. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 9205-17	6.6	91
137	Vascular amyloidosis impairs the gliovascular unit in a mouse model of Alzheimer's disease. <i>Brain</i> , <b>2015</b> , 138, 3716-33	11.2	88
136	Role of lysophosphatidic acid and rho in glioma cell motility. <i>Cytoskeleton</i> , <b>2000</b> , 45, 185-99		88
135	Functional expression of Kir4.1 channels in spinal cord astrocytes. <i>Glia</i> , <b>2006</b> , 53, 516-28	9	87
134	Electrophysiological properties of human astrocytic tumor cells In situ: enigma of spiking glial cells. <i>Journal of Neurophysiology</i> , <b>1998</b> , 79, 2782-93	3.2	85
133	Role of Kir4.1 channels in growth control of glia. <i>Glia</i> , <b>2007</b> , 55, 1668-79	9	81
132	Mislocalization of Kir channels in malignant glia. <i>Glia</i> , <b>2004</b> , 46, 63-73	9	81
131	A role for ion channels in glioma cell invasion. <i>Neuron Glia Biology</i> , <b>2006</b> , 2, 39-49		81
130	Cytoplasmic volume condensation is an integral part of mitosis. <i>Cell Cycle</i> , <b>2007</b> , 6, 1613-20	4.7	78

129	Reduction of glial proliferation by K <sup>+</sup> channel blockers is mediated by changes in pHi. <i>NeuroReport</i> , <b>1994</b> , 6, 193-6	1.7	78
128	The neurophysiology of glial cells. <i>Journal of Clinical Neurophysiology</i> , <b>1992</b> , 9, 224-51	2.2	78
127	Sequence and expression of human GABAA receptor alpha 1 and beta 1 subunits. <i>FEBS Letters</i> , <b>1989</b> , 244, 361-4	3.8	78
126	Differential benzodiazepine pharmacology of mammalian recombinant GABAA receptors. <i>Neuroscience Letters</i> , <b>1990</b> , 115, 269-73	3.3	78
125	Expression of voltage-activated chloride currents in acute slices of human gliomas. <i>Neuroscience</i> , <b>1998</b> , 83, 1161-73	3.9	77
124	BK channels are linked to inositol 1,4,5-triphosphate receptors via lipid rafts: a novel mechanism for coupling [Ca <sup>2+</sup> ] <sub>i</sub> to ion channel activation. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 31558-68	5.4	76
123	Astrocytes protect neurons from neurotoxic injury by serum glutamate. <i>Glia</i> , <b>1998</b> , 22, 237-48	9	75
122	BK channels in human glioma cells have enhanced calcium sensitivity. <i>Glia</i> , <b>2002</b> , 38, 281-91	9	74
121	Ion channel expression by astrocytes in situ: comparison of different CNS regions. <i>Glia</i> , <b>2000</b> , 30, 27-38	9	74
120	GABAergic disinhibition and impaired KCC2 cotransporter activity underlie tumor-associated epilepsy. <i>Glia</i> , <b>2015</b> , 63, 23-36	9	72
119	Glutamate transporters in the biology of malignant gliomas. <i>Cellular and Molecular Life Sciences</i> , <b>2014</b> , 71, 1839-54	10.3	70
118	Microphysiological Human Brain and Neural Systems-on-a-Chip: Potential Alternatives to Small Animal Models and Emerging Platforms for Drug Discovery and Personalized Medicine. <i>Stem Cell Reviews and Reports</i> , <b>2017</b> , 13, 381-406	6.4	68
117	Hypoxia increases the dependence of glioma cells on glutathione. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 37716-24	5.4	68
116	Differential distribution of Kir4.1 in spinal cord astrocytes suggests regional differences in K <sup>+</sup> homeostasis. <i>Journal of Neurophysiology</i> , <b>2007</b> , 98, 786-93	3.2	68
115	Biophysical and pharmacological characterization of chloride currents in human astrocytoma cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>1996</b> , 270, C1511-21	5.4	68
114	Bradykinin-induced chemotaxis of human gliomas requires the activation of KCa3.1 and ClC-3. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 1427-40	6.6	65
113	Sulfasalazine inhibits the growth of primary brain tumors independent of nuclear factor-kappaB. <i>Journal of Neurochemistry</i> , <b>2009</b> , 110, 182-93	6	65
112	Modulation of Kv1.5 currents by Src tyrosine phosphorylation: potential role in the differentiation of astrocytes. <i>Journal of Neuroscience</i> , <b>2000</b> , 20, 5245-53	6.6	65

111	Water permeability through aquaporin-4 is regulated by protein kinase C and becomes rate-limiting for glioma invasion. <i>Neuroscience</i> , <b>2010</b> , 168, 971-81	3.9	63
110	A proinvasive role for the Ca(2+) -activated K(+) channel KCa3.1 in malignant glioma. <i>Glia</i> , <b>2014</b> , 62, 971-81		62
109	Genetic ablation of phosphatidylinositol transfer protein function in murine embryonic stem cells. <i>Molecular Biology of the Cell</i> , <b>2002</b> , 13, 739-54	3.5	62
108	Cl- and K+ channels and their role in primary brain tumour biology. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2014</b> , 369, 20130095	5.8	60
107	Spinal cord injury causes a wide-spread, persistent loss of Kir4.1 and glutamate transporter 1: benefit of 17 beta-oestradiol treatment. <i>Brain</i> , <b>2010</b> , 133, 1013-25	11.2	60
106	Cytoplasmic condensation is both necessary and sufficient to induce apoptotic cell death. <i>Journal of Cell Science</i> , <b>2008</b> , 121, 290-7	5.3	60
105	Disruption of transient receptor potential canonical channel 1 causes incomplete cytokinesis and slows the growth of human malignant gliomas. <i>Glia</i> , <b>2010</b> , 58, 1145-56	9	59
104	Astrocytes from human hippocampal epileptogenic foci exhibit action potential-like responses. <i>Epilepsia</i> , <b>1998</b> , 39, 347-54	6.4	59
103	Biophysical and pharmacological characterization of hypotonically activated chloride currents in cortical astrocytes. <i>Glia</i> , <b>2004</b> , 46, 419-36	9	55
102	Perineuronal nets decrease membrane capacitance of peritumoral fast spiking interneurons in a model of epilepsy. <i>Nature Communications</i> , <b>2018</b> , 9, 4724	17.4	55
101	Unique biology of gliomas: challenges and opportunities. <i>Trends in Neurosciences</i> , <b>2012</b> , 35, 546-56	13.3	54
100	Human glioma cells induce hyperexcitability in cortical networks. <i>Epilepsia</i> , <b>2012</b> , 53, 1360-70	6.4	53
99	Sodium channel mRNAs in cultured spinal cord astrocytes: in situ hybridization in identified cell types. <i>Molecular Brain Research</i> , <b>1994</b> , 23, 235-45		53
98	Ion channels and amino acid transporters support the growth and invasion of primary brain tumors. <i>Molecular Neurobiology</i> , <b>2004</b> , 29, 61-71	6.2	52
97	Heterogeneity of potassium currents in cultured oligodendrocytes. <i>Glia</i> , <b>1988</b> , 1, 415-20	9	51
96	Polymer Composite with Carbon Nanofibers Aligned during Thermal Drawing as a Microelectrode for Chronic Neural Interfaces. <i>ACS Nano</i> , <b>2017</b> , 11, 6574-6585	16.7	50
95	Ion channels in spinal cord astrocytes in vitro. III. Modulation of channel expression by coculture with neurons and neuron-conditioned medium. <i>Journal of Neurophysiology</i> , <b>1993</b> , 69, 819-31	3.2	50
94	With-No-Lysine Kinase 3 (Wnk3) stimulates glioma invasion by regulating cell volume. <i>American Journal of Physiology - Cell Physiology</i> , <b>2011</b> , 301, C1150-60	5.4	48

93	Rat hippocampal astrocytes exhibit electrogenic sodium-bicarbonate co-transport. <i>Journal of Neurophysiology</i> , <b>1994</b> , 72, 2580-9	3.2	48
92	Two types of Na(+)-currents in cultured rat optic nerve astrocytes: changes with time in culture and with age of culture derivation. <i>Journal of Neuroscience Research</i> , <b>1991</b> , 30, 275-87	4.4	48
91	Differential role of IK and BK potassium channels as mediators of intrinsic and extrinsic apoptotic cell death. <i>American Journal of Physiology - Cell Physiology</i> , <b>2012</b> , 303, C1070-8	5.4	47
90	Beta-adrenergic modulation of glial inwardly rectifying potassium channels. <i>Journal of Neurochemistry</i> , <b>1995</b> , 64, 1576-84	6	47
89	Muscarinic activation of BK channels induces membrane oscillations in glioma cells and leads to inhibition of cell migration. <i>Journal of Membrane Biology</i> , <b>2000</b> , 176, 31-40	2.3	47
88	Bradykinin enhances invasion of malignant glioma into the brain parenchyma by inducing cells to undergo amoeboid migration. <i>Journal of Physiology</i> , <b>2014</b> , 592, 5109-27	3.9	44
87	Manipulation of the delayed rectifier Kv1.5 potassium channel in glial cells by antisense oligodeoxynucleotides. <i>Glia</i> , <b>1996</b> , 18, 177-84	9	44
86	Astrocytes, as well as neurons, express a diversity of ion channels. <i>Canadian Journal of Physiology and Pharmacology</i> , <b>1992</b> , 70 Suppl, S223-38	2.4	44
85	Specificity of cell-cell coupling in rat optic nerve astrocytes in vitro. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1990</b> , 87, 9833-7	11.5	44
84	Process- and bio-inspired hydrogels for 3D bioprinting of soft free-standing neural and glial tissues. <i>Biofabrication</i> , <b>2019</b> , 11, 025009	10.5	43
83	Lysophosphatidic acid stimulates actomyosin contraction in astrocytes. <i>Journal of Neuroscience Research</i> , <b>1998</b> , 53, 343-52	4.4	43
82	Spontaneous intracellular calcium oscillations in cortical astrocytes from a patient with intractable childhood epilepsy (Rasmussen's Encephalitis). <i>Glia</i> , <b>1997</b> , 21, 332-337	9	42
81	Muscarinic Activation of BK Channels Induces Membrane Oscillations in Glioma Cells and Leads to Inhibition of Cell Migration. <i>Journal of Membrane Biology</i> , <b>2000</b> , 176, 31-40	2.3	42
80	Differential modulation of TTX-sensitive and TTX-resistant Na <sup>+</sup> channels in spinal cord astrocytes following activation of protein kinase C. <i>Journal of Neuroscience</i> , <b>1993</b> , 13, 4889-97	6.6	42
79	Bovine serum albumin and lysophosphatidic acid stimulate calcium mobilization and reversal of cAMP-induced stellation in rat spinal cord astrocytes. <i>Glia</i> , <b>1997</b> , 20, 163-72	9	41
78	Spinal cord astrocytes in vitro: phenotypic diversity and sodium channel immunoreactivity. <i>Glia</i> , <b>1993</b> , 7, 272-85	9	41
77	Contribution of chloride channels to volume regulation of cortical astrocytes. <i>American Journal of Physiology - Cell Physiology</i> , <b>2003</b> , 284, C1460-7	5.4	39
76	Human astrocytoma cells express a unique chloride current. <i>NeuroReport</i> , <b>1996</b> , 7, 1020-4	1.7	39



75	Neuregulin-1 enhances motility and migration of human astrocytic glioma cells. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 20971-8	5.4	38
74	Calcium entry via TRPC1 channels activates chloride currents in human glioma cells. <i>Cell Calcium</i> , <b>2013</b> , 53, 187-94	4	37
73	Relationship between Na <sup>+</sup> current expression and cell-cell coupling in astrocytes cultured from rat hippocampus. <i>Journal of Neurophysiology</i> , <b>1991</b> , 65, 989-1002	3.2	37
72	Neuregulin-1 enhances survival of human astrocytic glioma cells. <i>Glia</i> , <b>2005</b> , 51, 217-28	9	36
71	Metabotropic glutamate receptor agonists reduce glutamate release from cultured astrocytes. <i>Glia</i> , <b>1999</b> , 25, 270-281	9	36
70	Role of glutamate transporters in redox homeostasis of the brain. <i>Neurochemistry International</i> , <b>2014</b> , 73, 181-91	4.4	35
69	Astrocytic inwardly rectifying potassium currents are dependent on external sodium ions. <i>Journal of Neurophysiology</i> , <b>1996</b> , 76, 626-30	3.2	35
68	Differential inhibition of glial K <sup>(+)</sup> currents by 4-AP. <i>Journal of Neurophysiology</i> , <b>1999</b> , 82, 3476-87	3.2	34
67	Modulation of glutamatergic transmission by bergmann glial cells in rat cerebellum in situ. <i>Journal of Neurophysiology</i> , <b>2003</b> , 89, 979-88	3.2	33
66	Sodium channel expression in optic nerve astrocytes chronically deprived of axonal contact. <i>Glia</i> , <b>1992</b> , 6, 19-29	9	33
65	MAPK induces AQP1 expression in astrocytes following injury. <i>Glia</i> , <b>2010</b> , 58, 209-17	9	31
64	Inhibition of glial Na <sup>+</sup> and K <sup>+</sup> currents by tamoxifen. <i>Journal of Membrane Biology</i> , <b>2001</b> , 181, 125-35	2.3	30
63	Glial cells of the oligodendrocyte lineage express proton-activated Na <sup>+</sup> channels. <i>Journal of Neuroscience Research</i> , <b>1989</b> , 24, 496-500	4.4	30
62	Reactive astrocytes show enhanced inwardly rectifying K <sup>+</sup> currents in situ. <i>NeuroReport</i> , <b>2000</b> , 11, 3151-5.7	5.7	28
61	KCa3.1 modulates neuroblast migration along the rostral migratory stream (RMS) in vivo. <i>Cerebral Cortex</i> , <b>2014</b> , 24, 2388-400	5.1	27
60	Involvement of tumor acidification in brain cancer pathophysiology. <i>Frontiers in Physiology</i> , <b>2013</b> , 4, 316	4.6	26
59	Chemotaxis of MDCK-F cells toward fibroblast growth factor-2 depends on transient receptor potential canonical channel 1. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2011</b> , 461, 295-306	4.6	26
58	Kinase activation of ClC-3 accelerates cytoplasmic condensation during mitotic cell rounding. <i>American Journal of Physiology - Cell Physiology</i> , <b>2012</b> , 302, C527-38	5.4	25

57	A role for ion channels in perivascular glioma invasion. <i>European Biophysics Journal</i> , <b>2016</b> , 45, 635-648	1.9	24
56	Extracellular glutamine is a critical modulator for regulatory volume increase in human glioma cells. <i>Brain Research</i> , <b>2007</b> , 1144, 231-8	3.7	24
55	Inhibition of nuclear factor kappa-B signaling reduces growth in medulloblastoma in vivo. <i>BMC Cancer</i> , <b>2011</b> , 11, 136	4.8	22
54	Erythropoietin-induced neuroprotection requires cystine glutamate exchanger activity. <i>Brain Research</i> , <b>2010</b> , 1321, 88-95	3.7	22
53	Hypoxic preconditioning involves system Xc- regulation in mouse neural stem cells. <i>Stem Cell Research</i> , <b>2012</b> , 8, 285-91	1.6	21
52	Recording of intracellular Ca <sup>2+</sup> , Cl <sup>-</sup> , pH and membrane potential in cultured astrocytes using a fluorescence plate reader. <i>Journal of Neuroscience Methods</i> , <b>1999</b> , 91, 73-81	3	21
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50	The Neural Cell Adhesion Molecule (N-CAM) Modulates K <sup>+</sup> Channels in Cultured Glial Precursor Cells. <i>European Journal of Neuroscience</i> , <b>1991</b> , 3, 230-236	3.5	19
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