Harald Sontheimer

List of Publications by Year in Descending Order

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	Astrocyte plasticity in mice ensures continued endfoot coverage of cerebral blood vessels following injury and declines with age.. *Nature Communications*, **2022**, 13, 1794	17.4	2
199	Fishing for Contact: Modeling Perivascular Glioma Invasion in the Zebrafish Brain. *ACS Pharmacology and Translational Science*, **2021**, 4, 1295-1305	5.9	5
198	Dysregulation of Ambient Glutamate and Glutamate Receptors in Epilepsy: An Astrocytic Perspective. *Frontiers in Neurology*, **2021**, 12, 652159	4.1	6
197	Neuroscience: The New English Major?. *Neuroscientist*, **2021**, 10738584211003992	7.6	
196	Antiepileptogenesis and disease modification: Progress, challenges, and the path forward-Report of the Preclinical Working Group of the 2018 NINDS-sponsored antiepileptogenesis and disease modification workshop. *Epilepsia Open*, **2021**, 6, 276-296	4	5
195	Perineuronal Net Dynamics in the Pathophysiology of Epilepsy. *Epilepsy Currents*, **2021**, 21, 273-281	1.3	4
194	Using Zebrafish to Elucidate Glial-Vascular Interactions During CNS Development. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 654338	5.7	1
193	Development and implementation of a scalable and versatile test for COVID-19 diagnostics in rural communities. *Nature Communications*, **2021**, 12, 4400	17.4	2
192	Shared Mechanisms of Disease **2021**, 385-414		
191	Thermally Drawn Stretchable Electrical and Optical Fiber Sensors for Multimodal Extreme Deformation Sensing. *Advanced Optical Materials*, **2021**, 9, 2001815	8.1	12
190	Reactive astrocyte nomenclature, definitions, and future directions. *Nature Neuroscience*, **2021**, 24, 312-325	25	298
189	Nano-optoelectrodes Integrated with Flexible Multifunctional Fiber Probes by High-Throughput Scalable Fabrication. *ACS Applied Materials & Interfaces*, **2021**, 13, 9156-9165	9.5	2
188	Seizure Disorders and Epilepsy **2021**, 51-77		
187	3D Printed Multiplexed Competitive Migration Assays with Spatially Programmable Release Sources. *Advanced Biology*, **2020**, 4, e1900225	3.5	2
186	Potassium and glutamate transport is impaired in scar-forming tumor-associated astrocytes. *Neurochemistry International*, **2020**, 133, 104628	4.4	8
185	Spatially expandable fiber-based probes as a multifunctional deep brain interface. *Nature Communications*, **2020**, 11, 6115	17.4	11
184	Process- and bio-inspired hydrogels for 3D bioprinting of soft free-standing neural and glial tissues. *Biofabrication*, **2019**, 11, 025009	10.5	43

183	Sulfasalazine decreases mouse cortical hyperexcitability. *Epilepsia*, **2019**, 60, 1365-1377	6.4	8
182	Acetylcholine Receptor Activation as a Modulator of Glioblastoma Invasion. *Cells*, **2019**, 8,	7.9	12
181	Protocol to quantitatively assess the structural integrity of Perineuronal Nets. *Bio-protocol*, **2019**, 9, e3234	0.9	2
180	Neuron-glia interactions in the pathophysiology of epilepsy. *Nature Reviews Neuroscience*, **2019**, 20, 282-297	29.5	126
179	Combating malignant astrocytes: Strategies mitigating tumor invasion. *Neuroscience Research*, **2018**, 126, 22-30	2.9	7
178	Perineuronal nets decrease membrane capacitance of peritumoral fast spiking interneurons in a model of epilepsy. *Nature Communications*, **2018**, 9, 4724	17.4	55
177	Microphysiological Human Brain and Neural Systems-on-a-Chip: Potential Alternatives to Small Animal Models and Emerging Platforms for Drug Discovery and Personalized Medicine. *Stem Cell Reviews and Reports*, **2017**, 13, 381-406	6.4	68
176	Polymer Composite with Carbon Nanofibers Aligned during Thermal Drawing as a Microelectrode for Chronic Neural Interfaces. *ACS Nano*, **2017**, 11, 6574-6585	16.7	50
175	Peritumoral Epilepsy? **2017**,		1
174	A role for ion channels in perivascular glioma invasion. *European Biophysics Journal*, **2016**, 45, 635-648	1.9	24
173	Glia as drivers of abnormal neuronal activity. *Nature Neuroscience*, **2016**, 19, 28-33	25.5	120
172	Reactive astrogliosis causes the development of spontaneous seizures. *Journal of Neuroscience*, **2015**, 35, 3330-45	6.6	171
171	Brain cancer: Tumour cells on neighbourhood watch. *Nature*, **2015**, 528, 49-50	50.4	15
170	A frightening thought: Neuronal activity enhances tumor growth. *Cell Research*, **2015**, 25, 891-2	24.7	2
169	Vascular amyloidosis impairs the gliovascular unit in a mouse model of Alzheimer's disease. *Brain*, **2015**, 138, 3716-33	11.2	88
168	GABAergic disinhibition and impaired KCC2 cotransporter activity underlie tumor-associated epilepsy. *Glia*, **2015**, 63, 23-36	9	72
167	Glioma **2015**,		0
166	Shared Mechanisms of Disease **2015**, 407-443		

165	SLC7A11 expression is associated with seizures and predicts poor survival in patients with malignant glioma. *Science Translational Medicine*, **2015**, 7, 289ra86	17.5	137
164	Ionic Channels in Glia **2015**,		
163	Bradykinin enhances invasion of malignant glioma into the brain parenchyma by inducing cells to undergo amoeboid migration. *Journal of Physiology*, **2014**, 592, 5109-27	3.9	44
162	A neurocentric perspective on glioma invasion. *Nature Reviews Neuroscience*, **2014**, 15, 455-65	13.5	446
161	Cl- and K+ channels and their role in primary brain tumour biology. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2014**, 369, 20130095	5.8	60
160	Role of glutamate transporters in redox homeostasis of the brain. *Neurochemistry International*, **2014**, 73, 181-91	4.4	35
159	Disruption of astrocyte-vascular coupling and the blood-brain barrier by invading glioma cells. *Nature Communications*, **2014**, 5, 4196	17.4	309
158	A proinvasive role for the Ca(2+) -activated K(+) channel KCa3.1 in malignant glioma. *Glia*, **2014**, 62, 971-81	6	62
157	Autocrine regulation of glioma cell proliferation via pHe-sensitive K(+) channels. *American Journal of Physiology - Cell Physiology*, **2014**, 306, C493-505	5.4	9
156	KCa3.1 modulates neuroblast migration along the rostral migratory stream (RMS) in vivo. *Cerebral Cortex*, **2014**, 24, 2388-400	5.1	27
155	Glutamate transporters in the biology of malignant gliomas. *Cellular and Molecular Life Sciences*, **2014**, 71, 1839-54	10.3	70
154	Novel Therapeutic Approaches to Malignant Gliomas **2014**, 315-350		
153	Calcium entry via TRPC1 channels activates chloride currents in human glioma cells. *Cell Calcium*, **2013**, 53, 187-94	4	37
152	Involvement of tumor acidification in brain cancer pathophysiology. *Frontiers in Physiology*, **2013**, 4, 316	4.6	26
151	Bradykinin-induced chemotaxis of human gliomas requires the activation of KCa3.1 and ClC-3. *Journal of Neuroscience*, **2013**, 33, 1427-40	6.6	65
150	Hypoxic preconditioning involves system Xc- regulation in mouse neural stem cells. *Stem Cell Research*, **2012**, 8, 285-91	1.6	21
149	Human glioma cells induce hyperexcitability in cortical networks. *Epilepsia*, **2012**, 53, 1360-70	6.4	53
148	Unique biology of gliomas: challenges and opportunities. *Trends in Neurosciences*, **2012**, 35, 546-56	13.3	54

147	Kinase activation of ClC-3 accelerates cytoplasmic condensation during mitotic cell rounding. *American Journal of Physiology - Cell Physiology*, **2012**, 302, C527-38	5.4	25
146	Differential role of IK and BK potassium channels as mediators of intrinsic and extrinsic apoptotic cell death. *American Journal of Physiology - Cell Physiology*, **2012**, 303, C1070-8	5.4	47
145	Inhibition of nuclear factor kappa-B signaling reduces growth in medulloblastoma in vivo. *BMC Cancer*, **2011**, 11, 136	4.8	22
144	Chemotaxis of MDCK-F cells toward fibroblast growth factor-2 depends on transient receptor potential canonical channel 1. *Pflugers Archiv European Journal of Physiology*, **2011**, 461, 295-306	4.6	26
143	Transient receptor potential canonical channels are essential for chemotactic migration of human malignant gliomas. *Journal of Cellular Physiology*, **2011**, 226, 1879-88	7	93
142	Glutamate and the biology of gliomas. *Glia*, **2011**, 59, 1181-9	9	185
141	Hydrodynamic cellular volume changes enable glioma cell invasion. *Journal of Neuroscience*, **2011**, 31, 17250-9	6.6	97
140	Bradykinin promotes the chemotactic invasion of primary brain tumors. *Journal of Neuroscience*, **2011**, 31, 4858-67	6.6	132
139	Glutamate release by primary brain tumors induces epileptic activity. *Nature Medicine*, **2011**, 17, 1269-74	50.5	292
138	With-No-Lysine Kinase 3 (WNK3) stimulates glioma invasion by regulating cell volume. *American Journal of Physiology - Cell Physiology*, **2011**, 301, C1150-60	5.4	48
137	Ion channels and transporters [corrected] in cancer. 2. Ion channels and the control of cancer cell migration. *American Journal of Physiology - Cell Physiology*, **2011**, 301, C541-9	5.4	120
136	Inhibition of the Sodium-Potassium-Chloride Cotransporter Isoform-1 reduces glioma invasion. *Cancer Research*, **2010**, 70, 5597-606	10.1	93
135	Molecular interaction and functional regulation of ClC-3 by Ca2+/calmodulin-dependent protein kinase II (CaMKII) in human malignant glioma. *Journal of Biological Chemistry*, **2010**, 285, 11188-96	5.4	96
134	Hypoxia increases the dependence of glioma cells on glutathione. *Journal of Biological Chemistry*, **2010**, 285, 37716-24	5.4	68
133	Spinal cord injury causes a wide-spread, persistent loss of Kir4.1 and glutamate transporter 1: benefit of 17 beta-oestradiol treatment. *Brain*, **2010**, 133, 1013-25	11.2	60
132	Water permeability through aquaporin-4 is regulated by protein kinase C and becomes rate-limiting for glioma invasion. *Neuroscience*, **2010**, 168, 971-81	3.9	63
131	Biophysical properties of human medulloblastoma cells. *Journal of Membrane Biology*, **2010**, 237, 59-69	2.3	9
130	Erythropoietin-induced neuroprotection requires cystine glutamate exchanger activity. *Brain Research*, **2010**, 1321, 88-95	3.7	22

129	MAPK induces AQP1 expression in astrocytes following injury. *Glia*, **2010**, 58, 209-17	9	31
128	Disruption of transient receptor potential canonical channel 1 causes incomplete cytokinesis and slows the growth of human malignant gliomas. *Glia*, **2010**, 58, 1145-56	9	59
127	Chloride Transport in Glioma Growth and Cell Invasion **2010**, 519-529		
126	GLIA/ASTROCYTES | Peritumoral Epilepsy **2009**, 401-408		
125	Ionic Channels in Glia **2009**, 237-247		
124	Glioma **2009**, 877-884		1
123	Chloride accumulation drives volume dynamics underlying cell proliferation and migration. *Journal of Neurophysiology*, **2009**, 101, 750-7	3.2	103
122	Sulfasalazine inhibits the growth of primary brain tumors independent of nuclear factor-kappaB. *Journal of Neurochemistry*, **2009**, 110, 182-93	6	65
121	Role of Ion Channels and Amino-Acid Transporters in the Biology of Astrocytic Tumors **2009**, 527-546		1
120	A role for glutamate in growth and invasion of primary brain tumors. *Journal of Neurochemistry*, **2008**, 105, 287-95	6	138
119	Functional implications for Kir4.1 channels in glial biology: from K+ buffering to cell differentiation. *Journal of Neurochemistry*, **2008**, 107, 589-601	6	224
118	ClC3 is a critical regulator of the cell cycle in normal and malignant glial cells. *Journal of Neuroscience*, **2008**, 28, 9205-17	6.6	91
117	An unexpected role for ion channels in brain tumor metastasis. *Experimental Biology and Medicine*, **2008**, 233, 779-91	3.7	175
116	Cytoplasmic condensation is both necessary and sufficient to induce apoptotic cell death. *Journal of Cell Science*, **2008**, 121, 290-7	5.3	60
115	Autocrine glutamate signaling promotes glioma cell invasion. *Cancer Research*, **2007**, 67, 9463-71	10.1	238
114	Role of Kir4.1 channels in growth control of glia. *Glia*, **2007**, 55, 1668-79	9	81
113	Extracellular glutamine is a critical modulator for regulatory volume increase in human glioma cells. *Brain Research*, **2007**, 1144, 231-8	3.7	24
112	BK channels are linked to inositol 1,4,5-triphosphate receptors via lipid rafts: a novel mechanism for coupling [Ca(2+)](i) to ion channel activation. *Journal of Biological Chemistry*, **2007**, 282, 31558-68	5.4	76

111	Cytoplasmic volume condensation is an integral part of mitosis. *Cell Cycle*, **2007**, 6, 1613-20	4.7	78
110	Differential distribution of Kir4.1 in spinal cord astrocytes suggests regional differences in K+ homeostasis. *Journal of Neurophysiology*, **2007**, 98, 786-93	3.2	68
109	Expression and function of water channels (aquaporins) in migrating malignant astrocytes. *Glia*, **2007**, 55, 1034-43	9	132
108	Functional expression of Kir4.1 channels in spinal cord astrocytes. *Glia*, **2006**, 53, 516-28	9	87
107	Expression and function of calcium-activated potassium channels in human glioma cells. *Glia*, **2006**, 54, 223-33	9	120
106	Anion channels in astrocytes: biophysics, pharmacology, and function. *Glia*, **2006**, 54, 747-57	9	100
105	A role for ion channels in glioma cell invasion. *Neuron Glia Biology*, **2006**, 2, 39-49		147
104	A role for ion channels in glioma cell invasion. *Neuron Glia Biology*, **2006**, 2, 39-49		81
103	Inhibition of cystine uptake disrupts the growth of primary brain tumors. *Journal of Neuroscience*, **2005**, 25, 7101-10	6.6	246
102	Neuregulin-1 enhances survival of human astrocytic glioma cells. *Glia*, **2005**, 51, 217-28	9	36
101	Modulation of glioma BK channels via erbB2. *Journal of Neuroscience Research*, **2005**, 81, 179-89	4.4	18
100	Ion channels and amino acid transporters support the growth and invasion of primary brain tumors. *Molecular Neurobiology*, **2004**, 29, 61-71	6.2	52
99	Mislocalization of Kir channels in malignant glia. *Glia*, **2004**, 46, 63-73	9	81
98	Biophysical and pharmacological characterization of hypotonically activated chloride currents in cortical astrocytes. *Glia*, **2004**, 46, 419-36	9	55
97	Role for calcium-activated potassium channels (BK) in growth control of human malignant glioma cells. *Journal of Neuroscience Research*, **2004**, 78, 224-34	4.4	95
96	Neuregulin-1 enhances motility and migration of human astrocytic glioma cells. *Journal of Biological Chemistry*, **2003**, 278, 20971-8	5.4	38
95	Expression of voltage-gated chloride channels in human glioma cells. *Journal of Neuroscience*, **2003**, 23, 5572-82	6.6	131
94	Modulation of glutamatergic transmission by bergmann glial cells in rat cerebellum in situ. *Journal of Neurophysiology*, **2003**, 89, 979-88	3.2	33

93	Current transients associated with BK channels in human glioma cells. *Journal of Membrane Biology*, **2003**, 193, 201-13	2.3	4
92	Malignant gliomas: perverting glutamate and ion homeostasis for selective advantage. *Trends in Neurosciences*, **2003**, 26, 543-9	13.3	101
91	Chlorotoxin inhibits glioma cell invasion via matrix metalloproteinase-2. *Journal of Biological Chemistry*, **2003**, 278, 4135-44	5.4	287
90	Contribution of chloride channels to volume regulation of cortical astrocytes. *American Journal of Physiology - Cell Physiology*, **2003**, 284, C1460-7	5.4	39
89	Cloning and characterization of glioma BK, a novel BK channel isoform highly expressed in human glioma cells. *Journal of Neuroscience*, **2002**, 22, 1840-9	6.6	124
88	BK channels in human glioma cells have enhanced calcium sensitivity. *Glia*, **2002**, 38, 281-91	9	74
87	Chlorotoxin, a scorpion-derived peptide, specifically binds to gliomas and tumors of neuroectodermal origin. *Glia*, **2002**, 39, 162-73	9	204
86	Genetic ablation of phosphatidylinositol transfer protein function in murine embryonic stem cells. *Molecular Biology of the Cell*, **2002**, 13, 739-54	3.5	62
85	Modulation of glial glutamate transport through cell interactions with the extracellular matrix. *International Journal of Developmental Neuroscience*, **2002**, 20, 209-17	2.7	14
84	BK channels in human glioma cells have enhanced calcium sensitivity **2002**, 38, 281		2
83	(1R,3S)-1-Aminocyclopentane-1,3-dicarboxylic acid (RS-ACPD) reduces intracellular glutamate levels in astrocytes. *Journal of Neurochemistry*, **2001**, 79, 756-66	6	12
82	Reduced expression of connexin-43 and functional gap junction coupling in human gliomas. *Glia*, **2001**, 33, 107-17	9	124
81	Inhibition of glial Na+ and K+ currents by tamoxifen. *Journal of Membrane Biology*, **2001**, 181, 125-35	2.3	30
80	Electrophysiological characteristics of reactive astrocytes in experimental cortical dysplasia. *Journal of Neurophysiology*, **2001**, 85, 1719-31	3.2	124
79	Volume-activated chloride currents contribute to the resting conductance and invasive migration of human glioma cells. *Journal of Neuroscience*, **2001**, 21, 7674-83	6.6	160
78	BK channels in human glioma cells. *Journal of Neurophysiology*, **2001**, 85, 790-803	3.2	102
77	Reactive astrocytes show enhanced inwardly rectifying K+ currents in situ. *NeuroReport*, **2000**, 11, 3151-5	1.7	28
76	Role of lysophosphatidic acid and rho in glioma cell motility. *Cytoskeleton*, **2000**, 45, 185-99		88

75	Ion channel expression by astrocytes in situ: comparison of different CNS regions. *Glia*, **2000**, 30, 27-38	9	74
74	Changes in ion channel expression accompany cell cycle progression of spinal cord astrocytes. *Glia*, **2000**, 30, 39-48	9	136
73	Activity-dependent extracellular K+ accumulation in rat optic nerve: the role of glial and axonal Na+ pumps. *Journal of Physiology*, **2000**, 522 Pt 3, 427-42	3.9	156
72	Muscarinic Activation of BK Channels Induces Membrane Oscillations in Glioma Cells and Leads to Inhibition of Cell Migration. *Journal of Membrane Biology*, **2000**, 176, 31-40	2.3	42
71	Muscarinic activation of BK channels induces membrane oscillations in glioma cells and leads to inhibition of cell migration. *Journal of Membrane Biology*, **2000**, 176, 31-40	2.3	47
70	Modulation of Kv1.5 currents by Src tyrosine phosphorylation: potential role in the differentiation of astrocytes. *Journal of Neuroscience*, **2000**, 20, 5245-53	6.6	65
69	Differential inhibition of glial K(+) currents by 4-AP. *Journal of Neurophysiology*, **1999**, 82, 3476-87	3.2	34
68	Modulation of glioma cell migration and invasion using Cl(-) and K(+) ion channel blockers. *Journal of Neuroscience*, **1999**, 19, 5942-54	6.6	255
67	Compromised glutamate transport in human glioma cells: reduction-mislocalization of sodium-dependent glutamate transporters and enhanced activity of cystine-glutamate exchange. *Journal of Neuroscience*, **1999**, 19, 10767-77	6.6	273
66	Recording of intracellular Ca2+, Cl-, pH and membrane potential in cultured astrocytes using a fluorescence plate reader. *Journal of Neuroscience Methods*, **1999**, 91, 73-81	3	21
65	Metabotropic glutamate receptor agonists reduce glutamate release from cultured astrocytes. *Glia* , **1999**, 25, 270-281	9	36
64	Metabotropic glutamate receptor agonists reduce glutamate release from cultured astrocytes. *Glia* , **1999**, 25, 270-81	9	9
63	Glioma cells release excitotoxic concentrations of glutamate. *Cancer Research*, **1999**, 59, 4383-91	10.1	296
62	Astrocytes from human hippocampal epileptogenic foci exhibit action potential-like responses. *Epilepsia*, **1998**, 39, 347-54	6.4	59
61	Lysophosphatidic acid stimulates actomyosin contraction in astrocytes. *Journal of Neuroscience Research*, **1998**, 53, 343-52	4.4	43
60	Astrocytes protect neurons from neurotoxic injury by serum glutamate. *Glia*, **1998**, 22, 237-48	9	75
59	Passive glial cells, fact or artifact?. *Journal of Membrane Biology*, **1998**, 166, 213-22	2.3	16
58	Properties of human glial cells associated with epileptic seizure foci. *Epilepsy Research*, **1998**, 32, 286-303	3	224

57	Expression of voltage-activated chloride currents in acute slices of human gliomas. *Neuroscience*, **1998**, 83, 1161-73	3.9	77
56	Glial glutamate transport as target for nitric oxide: consequences for neurotoxicity. *Progress in Brain Research*, **1998**, 118, 241-51	2.9	12
55	Spinal cord astrocytes display a switch from TTX-sensitive to TTX-resistant sodium currents after injury-induced gliosis in vitro. *Journal of Neurophysiology*, **1998**, 79, 2222-6	3.2	15
54	Electrophysiological properties of human astrocytic tumor cells In situ: enigma of spiking glial cells. *Journal of Neurophysiology*, **1998**, 79, 2782-93	3.2	85
53	Use of chlorotoxin for targeting of primary brain tumors. *Cancer Research*, **1998**, 58, 4871-9	10.1	149
52	Postnatal development of ionic currents in rat hippocampal astrocytes in situ. *Journal of Neurophysiology*, **1997**, 78, 461-77	3.2	141
51	Electrophysiological changes that accompany reactive gliosis in vitro. *Journal of Neuroscience*, **1997**, 17, 7316-29	6.6	112
50	Cell cycle-dependent expression of a glioma-specific chloride current: proposed link to cytoskeletal changes. *American Journal of Physiology - Cell Physiology*, **1997**, 273, C1290-7	5.4	93
49	Bovine serum albumin and lysophosphatidic acid stimulate calcium mobilization and reversal of cAMP-induced stellation in rat spinal cord astrocytes. *Glia*, **1997**, 20, 163-72	9	41
48	Spontaneous intracellular calcium oscillations in cortical astrocytes from a patient with intractable childhood epilepsy (Rasmussen's Encephalitis). *Glia*, **1997**, 21, 332-337	9	42
47	Ion channel expression and function in astrocytic scars **1997**, 101-113		
46	Voltage-gated Na+ channels in glia: properties and possible functions. *Trends in Neurosciences*, **1996**, 19, 325-31	13.3	107
45	Biophysical and pharmacological characterization of chloride currents in human astrocytoma cells. *American Journal of Physiology - Cell Physiology*, **1996**, 270, C1511-21	5.4	68
44	Astrocytic inwardly rectifying potassium currents are dependent on external sodium ions. *Journal of Neurophysiology*, **1996**, 76, 626-30	3.2	35
43	Cytokine modulation of glial glutamate uptake: a possible involvement of nitric oxide. *NeuroReport*, **1996**, 7, 2181-5	1.7	179
42	Human astrocytoma cells express a unique chloride current. *NeuroReport*, **1996**, 7, 1020-4	1.7	39
41	Manipulation of the delayed rectifier Kv1.5 potassium channel in glial cells by antisense oligodeoxynucleotides. *Glia*, **1996**, 18, 177-84	9	44
40	Beta-adrenergic modulation of glial inwardly rectifying potassium channels. *Journal of Neurochemistry*, **1995**, 64, 1576-84	6	47

39	Biophysical and pharmacological characterization of inwardly rectifying K+ currents in rat spinal cord astrocytes. *Journal of Neurophysiology*, **1995**, 73, 333-46	3.2	180
38	Review : Glial Neuronal Interactions: A Physiological Perspective. *Neuroscientist*, **1995**, 1, 328-337	7.6	16
37	Human epileptic astrocytes exhibit increased gap junction coupling. *Glia*, **1995**, 15, 195-202	9	115
36	The oligodendrocyte, the perinodal astrocyte, and the central node of Ranvier **1995**, 116-143		5
35	Astrocyte Na+ channels are required for maintenance of Na+/K(+)-ATPase activity. *Journal of Neuroscience*, **1994**, 14, 2464-75	6.6	125
34	Rat hippocampal astrocytes exhibit electrogenic sodium-bicarbonate co-transport. *Journal of Neurophysiology*, **1994**, 72, 2580-9	3.2	48
33	Voltage-dependent ion channels in glial cells. *Glia*, **1994**, 11, 156-72	9	236
32	Astrocytes exhibit regional specificity in gap-junction coupling. *Glia*, **1994**, 11, 315-25	9	116
31	Fibrous and protoplasmic astrocytes express GABAA receptors that differ in benzodiazepine pharmacology. *Brain Research*, **1994**, 636, 73-80	3.7	21
30	Sodium channel mRNAs in cultured spinal cord astrocytes: in situ hybridization in identified cell types. *Molecular Brain Research*, **1994**, 23, 235-45		53
29	Reduction of glial proliferation by K+ channel blockers is mediated by changes in pHi. *NeuroReport*, **1994**, 6, 193-6	1.7	78
28	Action potential conduction and sodium channel content in the optic nerve of the myelin-deficient rat. *Proceedings of the Royal Society B: Biological Sciences*, **1993**, 254, 245-50	4.4	11
27	Expression of voltage-activated ion channels by astrocytes and oligodendrocytes in the hippocampal slice. *Journal of Neurophysiology*, **1993**, 70, 1863-73	3.2	118
26	Ion channels in spinal cord astrocytes in vitro. III. Modulation of channel expression by coculture with neurons and neuron-conditioned medium. *Journal of Neurophysiology*, **1993**, 69, 819-31	3.2	50
25	Differential modulation of TTX-sensitive and TTX-resistant Na+ channels in spinal cord astrocytes following activation of protein kinase C. *Journal of Neuroscience*, **1993**, 13, 4889-97	6.6	42
24	Spinal cord astrocytes in vitro: phenotypic diversity and sodium channel immunoreactivity. *Glia*, **1993**, 7, 272-85	9	41
23	The expression of sodium channels in astrocytes in situ and in vitro. *Progress in Brain Research*, **1992** , 94, 89-107	2.9	8
22	The neurophysiology of glial cells. *Journal of Clinical Neurophysiology*, **1992**, 9, 224-51	2.2	78

21	Astrocytes, as well as neurons, express a diversity of ion channels. *Canadian Journal of Physiology and Pharmacology*, **1992**, 70 Suppl, S223-38	2.4	44
20	Different Na+ currents in P0- and P7-derived hippocampal astrocytes in vitro: evidence for a switch in Na+ channel expression in vivo. *Brain Research*, **1992**, 597, 24-9	3.7	18
19	Ion channels in spinal cord astrocytes in vitro. II. Biophysical and pharmacological analysis of two Na+ current types. *Journal of Neurophysiology*, **1992**, 68, 1001-11	3.2	102
18	Ion channels in spinal cord astrocytes in vitro. I. Transient expression of high levels of Na+ and K+ channels. *Journal of Neurophysiology*, **1992**, 68, 985-1000	3.2	111
17	Sodium channel expression in optic nerve astrocytes chronically deprived of axonal contact. *Glia*, **1992**, 6, 19-29	9	33
16	The Neural Cell Adhesion Molecule (N-CAM) Modulates K+ Channels in Cultured Glial Precursor Cells. *European Journal of Neuroscience*, **1991**, 3, 230-236	3.5	19
15	Two types of Na(+)-currents in cultured rat optic nerve astrocytes: changes with time in culture and with age of culture derivation. *Journal of Neuroscience Research*, **1991**, 30, 275-87	4.4	48
14	Cell coupling is restricted to subpopulations of astrocytes cultured from rat hippocampus and optic nerve. *Annals of the New York Academy of Sciences*, **1991**, 633, 592-6	6.5	4
13	Relationship between Na+ current expression and cell-cell coupling in astrocytes cultured from rat hippocampus. *Journal of Neurophysiology*, **1991**, 65, 989-1002	3.2	37
12	Na(+)-current expression in rat hippocampal astrocytes in vitro: alterations during development. *Journal of Neurophysiology*, **1991**, 65, 3-19	3.2	99
11	Specificity of cell-cell coupling in rat optic nerve astrocytes in vitro. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 9833-7	11.5	44
10	Differential benzodiazepine pharmacology of mammalian recombinant GABAA receptors. *Neuroscience Letters*, **1990**, 115, 269-73	3.3	78
9	Glial cells of the oligodendrocyte lineage express proton-activated Na+ channels. *Journal of Neuroscience Research*, **1989**, 24, 496-500	4.4	30
8	Importance of a novel GABAA receptor subunit for benzodiazepine pharmacology. *Nature*, **1989**, 338, 582-5	50.4	1203
7	Channel expression correlates with differentiation stage during the development of oligodendrocytes from their precursor cells in culture. *Neuron*, **1989**, 2, 1135-45	13.9	235
6	Functional chloride channels by mammalian cell expression of rat glycine receptor subunit. *Neuron*, **1989**, 2, 1491-7	13.9	161
5	Sequence and expression of human GABAA receptor alpha 1 and beta 1 subunits. *FEBS Letters*, **1989**, 244, 361-4	3.8	78
4	Two novel GABAA receptor subunits exist in distinct neuronal subpopulations. *Neuron*, **1989**, 3, 327-37	13.9	503

3	Glutamate opens Na+/K+ channels in cultured astrocytes. *Glia*, **1988**, 1, 328-36	9	184
2	Heterogeneity of potassium currents in cultured oligodendrocytes. *Glia*, **1988**, 1, 415-20	9	51
1	Transient expression shows ligand gating and allosteric potentiation of GABAA receptor subunits. *Science*, **1988**, 242, 1306-8	33.3	224