

# Christian Steinhauser

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

127  
papers

10,152  
citations

52  
h-index

100  
g-index

134  
ext. papers

11,829  
ext. citations

7  
avg, IF

6.24  
L-index

#	Paper	IF	Citations
127	Astrocytes and Epilepsy. <i>Neurochemical Research</i> , <b>2021</b> , 46, 2687-2695	4.6	5
126	Initiation of Experimental Temporal Lobe Epilepsy by Early Astrocyte Uncoupling Is Independent of TGF $\beta$ 1/ALK5 Signaling. <i>Frontiers in Neurology</i> , <b>2021</b> , 12, 660591	4.1	2
125	Cell death of hippocampal CA1 astrocytes during early epileptogenesis. <i>Epilepsia</i> , <b>2021</b> , 62, 1569-1583	6.4	5
124	Response: Astrocytes as alternative targets for more efficient antiepileptogenic drugs. <i>Epilepsia</i> , <b>2021</b> , 62, 2299-2300	6.4	
123	Auxiliary Subunits Control Function and Subcellular Distribution of AMPA Receptor Complexes in NG2 Glia of the Developing Hippocampus. <i>Frontiers in Cellular Neuroscience</i> , <b>2021</b> , 15, 669717	6.1	1
122	NO-mediated signal transmission in bladder vasculature as a therapeutic target of PDE5 inhibitors. Rodent model studies. <i>British Journal of Pharmacology</i> , <b>2021</b> , 178, 1073-1094	8.6	2
121	A Cellular Assay for the Identification and Characterization of Connexin Gap Junction Modulators. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	5
120	Reactive astrocyte nomenclature, definitions, and future directions. <i>Nature Neuroscience</i> , <b>2021</b> , 24, 312-325	35	298
119	Astrocytes and oligodendrocytes in the thalamus jointly maintain synaptic activity by supplying metabolites. <i>Cell Reports</i> , <b>2021</b> , 34, 108642	10.6	8
118	Cx43 carboxyl terminal domain determines AQP4 and Cx30 endfoot organization and blood brain barrier permeability.. <i>Scientific Reports</i> , <b>2021</b> , 11, 24334	4.9	1
117	Lipoprotein receptor loss in forebrain radial glia results in neurological deficits and severe seizures. <i>Glia</i> , <b>2020</b> , 68, 2517-2549	9	3
116	Uncoupling of the Astrocyte Syncytium Differentially Affects AQP4 Isoforms. <i>Cells</i> , <b>2020</b> , 9,	7.9	9
115	Constitutive deletion of astrocytic connexins aggravates kainate-induced epilepsy. <i>Glia</i> , <b>2020</b> , 68, 2136-2147	147	14
114	Properties of human astrocytes and NG2 glia. <i>Glia</i> , <b>2020</b> , 68, 756-767	9	23
113	Limited contribution of astroglial gap junction coupling to buffering of extracellular K in CA1 stratum radiatum. <i>Glia</i> , <b>2020</b> , 68, 918-931	9	9
112	Astrocytic GABA Accumulation in Experimental Temporal Lobe Epilepsy. <i>Frontiers in Neurology</i> , <b>2020</b> , 11, 614923	4.1	7
111	Connexin30 and Connexin43 show a time-of-day dependent expression in the mouse suprachiasmatic nucleus and modulate rhythmic locomotor activity in the context of chronodisruption. <i>Cell Communication and Signaling</i> , <b>2019</b> , 17, 61	7.5	11

110	TNF $\beta$ -Driven Astrocyte Purinergic Signaling during Epileptogenesis. <i>Trends in Molecular Medicine</i> , <b>2019</b> , 25, 70-72	11.5	7
109	Plaque-dependent morphological and electrophysiological heterogeneity of microglia in an Alzheimer $\beta$ disease mouse model. <i>Glia</i> , <b>2018</b> , 66, 1464-1480	9	43
108	Oligodendrocytes in the Mouse Corpus Callosum Maintain Axonal Function by Delivery of Glucose. <i>Cell Reports</i> , <b>2018</b> , 22, 2383-2394	10.6	64
107	Commonalities in epileptogenic processes from different acute brain insults: Do they translate?. <i>Epilepsia</i> , <b>2018</b> , 59, 37-66	6.4	123
106	Diversity of astrocyte potassium channels: An update. <i>Brain Research Bulletin</i> , <b>2018</b> , 136, 26-36	3.9	34
105	Connexin43, but not connexin30, contributes to adult neurogenesis in the dentate gyrus. <i>Brain Research Bulletin</i> , <b>2018</b> , 136, 91-100	3.9	6
104	Epilepsy and astrocyte energy metabolism. <i>Glia</i> , <b>2018</b> , 66, 1235-1243	9	89
103	Barreloid Borders and Neuronal Activity Shape Panglial Gap Junction-Coupled Networks in the Mouse Thalamus. <i>Cerebral Cortex</i> , <b>2018</b> , 28, 213-222	5.1	15
102	Heterogeneity and function of hippocampal macroglia. <i>Cell and Tissue Research</i> , <b>2018</b> , 373, 653-670	4.2	13
101	Anisotropic Panglial Coupling Reflects Tonotopic Organization in the Inferior Colliculus. <i>Frontiers in Cellular Neuroscience</i> , <b>2018</b> , 12, 431	6.1	5
100	Connexin-43 Gap Junctions Are Responsible for the Hypothalamic Tanycyte-Coupled Network. <i>Frontiers in Cellular Neuroscience</i> , <b>2018</b> , 12, 406	6.1	19
99	Differential regulation of chloride homeostasis and GABAergic transmission in the thalamus. <i>Scientific Reports</i> , <b>2018</b> , 8, 13929	4.9	8
98	AMPA receptors and seizures mediate hippocampal radial glia-like stem cell proliferation. <i>Glia</i> , <b>2018</b> , 66, 2397-2413	9	7
97	Changes in the proliferative capacity of NG2 cell subpopulations during postnatal development of the mouse hippocampus. <i>Brain Structure and Function</i> , <b>2017</b> , 222, 831-847	4	19
96	Rapid sodium signaling couples glutamate uptake to breakdown of ATP in perivascular astrocyte endfeet. <i>Glia</i> , <b>2017</b> , 65, 293-308	9	42
95	Morphological study of a connexin 43-GFP reporter mouse highlights glial heterogeneity, amacrine cells, and olfactory ensheathing cells. <i>Journal of Neuroscience Research</i> , <b>2017</b> , 95, 2182-2194	4.4	15
94	Ca-permeable AMPA receptors in mouse olfactory bulb astrocytes. <i>Scientific Reports</i> , <b>2017</b> , 7, 44817	4.9	17
93	Subcellular reorganization and altered phosphorylation of the astrocytic gap junction protein connexin43 in human and experimental temporal lobe epilepsy. <i>Glia</i> , <b>2017</b> , 65, 1809-1820	9	45

92	Collective cell migration of thyroid carcinoma cells: a beneficial ability to override unfavourable substrates. <i>Cellular Oncology (Dordrecht)</i> , <b>2017</b> , 40, 63-76	7.2	9
91	Chemically-induced TLE models: Topical application. <i>Journal of Neuroscience Methods</i> , <b>2016</b> , 260, 53-61	3	31
90	The NG2 Protein Is Not Required for Glutamatergic Neuron-NG2 Cell Synaptic Signaling. <i>Cerebral Cortex</i> , <b>2016</b> , 26, 51-7	5.1	14
89	Neuron-glia interaction in epilepsy. <i>Journal of Neuroscience Research</i> , <b>2016</b> , 94, 779-80	4.4	5
88	Astrocytes: a central element in neurological diseases. <i>Acta Neuropathologica</i> , <b>2016</b> , 131, 323-45	14.3	436
87	Physiological impact of CB1 receptor expression by hippocampal GABAergic interneurons. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2016</b> , 468, 727-37	4.6	22
86	New Phosphospecific Antibody Reveals Isoform-Specific Phosphorylation of CPEB3 Protein. <i>PLoS ONE</i> , <b>2016</b> , 11, e0150000	3.7	6
85	Altered splicing leads to reduced activation of CPEB3 in high-grade gliomas. <i>Oncotarget</i> , <b>2016</b> , 7, 41898-41912	4.3	5
84	pH-Sensitive K(+) Currents and Properties of K2P Channels in Murine Hippocampal Astrocytes. <i>Advances in Protein Chemistry and Structural Biology</i> , <b>2016</b> , 103, 263-94	5.3	5
83	Astrocytic TLR4 at the crossroads of inflammation and seizure susceptibility. <i>Journal of Cell Biology</i> , <b>2016</b> , 215, 607-609	7.3	14
82	Functional anisotropic panglial networks in the lateral superior olive. <i>Glia</i> , <b>2016</b> , 64, 1892-911	9	17
81	Experimental febrile seizures impair interastrocytic gap junction coupling in juvenile mice. <i>Journal of Neuroscience Research</i> , <b>2016</b> , 94, 804-13	4.4	21
80	Characterization of Panglial Gap Junction Networks in the Thalamus, Neocortex, and Hippocampus Reveals a Unique Population of Glial Cells. <i>Cerebral Cortex</i> , <b>2015</b> , 25, 3420-33	5.1	84
79	Role of astrocytes in epilepsy. <i>Cold Spring Harbor Perspectives in Medicine</i> , <b>2015</b> , 5, a022434	5.4	127
78	Astrocyte uncoupling as a cause of human temporal lobe epilepsy. <i>Brain</i> , <b>2015</b> , 138, 1208-22	11.2	181
77	Brain tumour cells interconnect to a functional and resistant network. <i>Nature</i> , <b>2015</b> , 528, 93-8	50.4	496
76	Neuron-glia synapses in the brain: properties, diversity and functions of NG2 glia. <i>E-Neuroforum</i> , <b>2015</b> , 6, 73-77		2
75	Novel astrocyte targets: new avenues for the therapeutic treatment of epilepsy. <i>Neuroscientist</i> , <b>2015</b> , 21, 62-83	7.6	40

74	Crucial Role for Astrocytes in Epilepsy <b>2015</b> , 2, 1-89		1
73	Characterization of cytoplasmic polyadenylation element binding 2 protein expression and its RNA binding activity. <i>Hippocampus</i> , <b>2015</b> , 25, 630-42	3.5	9
72	Augmentation of Ca(2+) signaling in astrocytic endfeet in the latent phase of temporal lobe epilepsy. <i>Frontiers in Cellular Neuroscience</i> , <b>2015</b> , 9, 49	6.1	15
71	Postnatal down-regulation of the GABAA receptor $\alpha$ subunit in neocortical NG2 cells accompanies synaptic-to-extrasynaptic switch in the GABAergic transmission mode. <i>Cerebral Cortex</i> , <b>2015</b> , 25, 1114-23	5.1	36
70	Heterogeneity in expression of functional ionotropic glutamate and GABA receptors in astrocytes across brain regions: insights from the thalamus. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2014</b> , 369, 20130602	5.8	43
69	Spatial properties of astrocyte gap junction coupling in the rat hippocampus. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2014</b> , 369, 20130600	5.8	43
68	Crucial Role for Astrocytes in Epilepsy <b>2014</b> , 155-186		0
67	Expression of the $\alpha$ -subunit distinguishes synaptic and extrasynaptic GABA(A) receptors in NG2 cells of the hippocampus. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 12030-40	6.6	35
66	Polarized distribution of AMPA, but not GABAA , receptors in radial glia-like cells of the adult dentate gyrus. <i>Glia</i> , <b>2013</b> , 61, 1146-54	9	20
65	Neuron-astrocyte signaling and epilepsy. <i>Experimental Neurology</i> , <b>2013</b> , 244, 4-10	5.7	98
64	Altered Kir and gap junction channels in temporal lobe epilepsy. <i>Neurochemistry International</i> , <b>2013</b> , 63, 682-7	4.4	37
63	Physiology and Function of Glial Gap Junctions in the Hippocampus <b>2013</b> , 19-27		
62	Versatile and simple approach to determine astrocyte territories in mouse neocortex and hippocampus. <i>PLoS ONE</i> , <b>2013</b> , 8, e69143	3.7	54
61	Germ-line recombination activity of the widely used hGFAP-Cre and nestin-Cre transgenes. <i>PLoS ONE</i> , <b>2013</b> , 8, e82818	3.7	23
60	Functional redundancy and compensation among members of gap junction protein families?. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2012</b> , 1818, 1971-84	3.8	46
59	Albumin is taken up by hippocampal NG2 cells and astrocytes and decreases gap junction coupling. <i>Epilepsia</i> , <b>2012</b> , 53, 1898-906	6.4	40
58	Mechanisms underlying blood-brain barrier dysfunction in brain pathology and epileptogenesis: role of astroglia. <i>Epilepsia</i> , <b>2012</b> , 53 Suppl 6, 53-9	6.4	62
57	Astrocyte dysfunction in temporal lobe epilepsy: K+ channels and gap junction coupling. <i>Glia</i> , <b>2012</b> , 60, 1192-202	9	132

56	Kir4.1 channels mediate a depolarization of hippocampal astrocytes under hyperammonemic conditions in situ. <i>Glia</i> , <b>2012</b> , 60, 965-78	9	32
55	Dual reporter approaches for identification of Cre efficacy and astrocyte heterogeneity. <i>FASEB Journal</i> , <b>2012</b> , 26, 4576-83	0.9	22
54	Role of astroglial connexin30 in hippocampal gap junction coupling. <i>Glia</i> , <b>2011</b> , 59, 511-9	9	67
53	Impact of aquaporin-4 channels on K <sup>+</sup> buffering and gap junction coupling in the hippocampus. <i>Glia</i> , <b>2011</b> , 59, 973-80	9	115
52	Gray matter NG2 cells display multiple Ca <sup>2+</sup> -signaling pathways and highly motile processes. <i>PLoS ONE</i> , <b>2011</b> , 6, e17575	3.7	80
51	Astrocyte dysfunction in epilepsy. <i>Brain Research Reviews</i> , <b>2010</b> , 63, 212-21		186
50	Neuron-glia synapses in the brain. <i>Brain Research Reviews</i> , <b>2010</b> , 63, 130-7		135
49	Synaptic processes-The role of glial cells. Preface. <i>Brain Research Reviews</i> , <b>2010</b> , 63, 1		4
48	Astrocyte dysfunction in temporal lobe epilepsy. <i>Epilepsia</i> , <b>2010</b> , 51, 54-54	6.4	10
47	Analysis of astroglial K <sup>+</sup> channel expression in the developing hippocampus reveals a predominant role of the Kir4.1 subunit. <i>Journal of Neuroscience</i> , <b>2009</b> , 29, 7474-88	6.6	174
46	Quality control of astrocyte-directed Cre transgenic mice: the benefits of a direct link between loss of gene expression and reporter activation. <i>Glia</i> , <b>2009</b> , 57, 680-92	9	19
45	Ultrastructural and functional characterization of satellitosis in the human lateral amygdala associated with Ammon's horn sclerosis. <i>Acta Neuropathologica</i> , <b>2009</b> , 117, 545-55	14.3	14
44	Connexin expression by radial glia-like cells is required for neurogenesis in the adult dentate gyrus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 11336-41	11.5	111
43	The proapoptotic BCL-2 homology domain 3-only protein Bim is not critical for acute excitotoxic cell death. <i>Journal of Neuropathology and Experimental Neurology</i> , <b>2009</b> , 68, 102-10	3.1	18
42	Role of Astrocytes in Epilepsy <b>2009</b> , 649-671		7
41	Astrocytic function and its alteration in the epileptic brain. <i>Epilepsia</i> , <b>2008</b> , 49 Suppl 2, 3-12	6.4	90
40	Functional analysis of embryonic stem cell-derived glial cells after integration into hippocampal slice cultures. <i>Stem Cells and Development</i> , <b>2008</b> , 17, 1141-52	4.4	5
39	NG2-expressing cells in the nervous system revealed by the NG2-EYFP-knockin mouse. <i>Genesis</i> , <b>2008</b> , 46, 743-57	1.9	88

38	Lack of P2X receptor mediated currents in astrocytes and GluR type glial cells of the hippocampal CA1 region. <i>Glia</i> , <b>2007</b> , 55, 1648-55	9	66
37	Functional changes in astroglial cells in epilepsy. <i>Glia</i> , <b>2006</b> , 54, 358-68	9	244
36	The impact of astrocytic gap junctional coupling on potassium buffering in the hippocampus. <i>Journal of Neuroscience</i> , <b>2006</b> , 26, 5438-47	6.6	446
35	Molecular and functional properties of neurons in the human lateral amygdala. <i>Molecular and Cellular Neurosciences</i> , <b>2006</b> , 31, 210-7	4.8	14
34	Classification of projection neurons and interneurons in the rat lateral amygdala based upon cluster analysis. <i>Molecular and Cellular Neurosciences</i> , <b>2006</b> , 33, 57-67	4.8	61
33	Astrocyte dysfunction in neurological disorders: a molecular perspective. <i>Nature Reviews Neuroscience</i> , <b>2006</b> , 7, 194-206	13.5	591
32	Functional characterization of P2X3 receptors fused with fluorescent proteins. <i>Molecular Membrane Biology</i> , <b>2005</b> , 22, 497-506	3.4	13
31	Synaptic transmission onto hippocampal glial cells with hGFAP promoter activity. <i>Journal of Cell Science</i> , <b>2005</b> , 118, 3791-803	5.3	129
30	Ion channels in astrocytes <b>2004</b> , 187-213		1
29	Astrocytes contain a vesicular compartment that is competent for regulated exocytosis of glutamate. <i>Nature Neuroscience</i> , <b>2004</b> , 7, 613-20	25.5	578
28	Distinct types of astroglial cells in the hippocampus differ in gap junction coupling. <i>Glia</i> , <b>2004</b> , 48, 36-43	9	155
27	Glial modulation of synaptic transmission in the hippocampus. <i>Glia</i> , <b>2004</b> , 47, 249-57	9	114
26	Enhanced relative expression of glutamate receptor 1 flip AMPA receptor subunits in hippocampal astrocytes of epilepsy patients with Ammon's horn sclerosis. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 1996-2003	6.6	71
25	Accelerated hippocampal spreading depression and enhanced locomotory activity in mice with astrocyte-directed inactivation of connexin43. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 766-76	6.6	223
24	Connexin 47 (Cx47)-deficient mice with enhanced green fluorescent protein reporter gene reveal predominant oligodendrocytic expression of Cx47 and display vacuolized myelin in the CNS. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 4549-59	6.6	224
23	Segregated expression of AMPA-type glutamate receptors and glutamate transporters defines distinct astrocyte populations in the mouse hippocampus. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 1750-8	6.6	383
22	Seizures preferentially stimulate proliferation of radial glia-like astrocytes in the adult dentate gyrus: functional and immunocytochemical analysis. <i>European Journal of Neuroscience</i> , <b>2003</b> , 18, 2769-78	3.5	157
21	Changes in splice variant expression and subunit assembly of AMPA receptors during maturation of hippocampal astrocytes. <i>Molecular and Cellular Neurosciences</i> , <b>2003</b> , 22, 248-58	4.8	24

20	Glial membrane channels and receptors in epilepsy: impact for generation and spread of seizure activity. <i>European Journal of Pharmacology</i> , <b>2002</b> , 447, 227-37	5.3	95
19	Changes in flip/flop splicing of astroglial AMPA receptors in human temporal lobe epilepsy. <i>Epilepsia</i> , <b>2002</b> , 43 Suppl 5, 162-7	6.4	41
18	AMPA receptor-mediated modulation of inward rectifier K <sup>+</sup> channels in astrocytes of mouse hippocampus. <i>Molecular and Cellular Neurosciences</i> , <b>2002</b> , 19, 447-58	4.8	92
17	Distribution of P2X receptors on astrocytes in juvenile rat hippocampus. <i>Glia</i> , <b>2001</b> , 36, 11-21	9	129
16	Ionotropic glutamate receptors in astrocytes. <i>Progress in Brain Research</i> , <b>2001</b> , 132, 287-99	2.9	73
15	Astrocytes in the hippocampus of patients with temporal lobe epilepsy display changes in potassium conductances. <i>European Journal of Neuroscience</i> , <b>2000</b> , 12, 2087-96	3.5	215
14	Functional and molecular properties of human astrocytes in acute hippocampal slices obtained from patients with temporal lobe epilepsy. <i>Epilepsia</i> , <b>2000</b> , 41 Suppl 6, S181-4	6.4	120
13	Ion channels in glial cells. <i>Brain Research Reviews</i> , <b>2000</b> , 32, 380-412		410
12	Lesion-induced changes of electrophysiological properties in astrocytes of the rat dentate gyrus <b>1999</b> , 28, 166-174		51
11	Effects of phenytoin, carbamazepine, and gabapentin on calcium channels in hippocampal granule cells from patients with temporal lobe epilepsy. <i>Epilepsia</i> , <b>1998</b> , 39, 355-63	6.4	94
10	AMPA receptor subunits expressed by single astrocytes in the juvenile mouse hippocampus. <i>Molecular Brain Research</i> , <b>1997</b> , 47, 286-94		64
9	Analysis of AMPA receptor properties during postnatal development of mouse hippocampal astrocytes. <i>Journal of Neurophysiology</i> , <b>1997</b> , 78, 2916-23	3.2	62
8	Analysis of ion channel expression by astrocytes in red nucleus brain stem slices of the rat. <i>Glia</i> , <b>1997</b> , 19, 234-246	9	35
7	News on glutamate receptors in glial cells. <i>Trends in Neurosciences</i> , <b>1996</b> , 19, 339-45	13.3	292
6	Identified glial cells in the early postnatal mouse hippocampus display different types of Ca <sup>2+</sup> currents. <i>Glia</i> , <b>1996</b> , 17, 181-94	9	75
5	Glial cells in the mouse hippocampus express AMPA receptors with an intermediate Ca <sup>2+</sup> permeability. <i>European Journal of Neuroscience</i> , <b>1995</b> , 7, 1872-81	3.5	117
4	Developmental regulation of Na <sup>+</sup> and K <sup>+</sup> conductances in glial cells of mouse hippocampal brain slices. <i>Glia</i> , <b>1995</b> , 15, 173-87	9	138
3	Properties of voltage-activated Na <sup>+</sup> and K <sup>+</sup> currents in mouse hippocampal glial cells in situ and after acute isolation from tissue slices. <i>Pflugers Archiv European Journal of Physiology</i> , <b>1994</b> , 428, 610-20 <sup>4.6</sup>		71



- 2 Kainate activates Ca(2+)-permeable glutamate receptors and blocks voltage-gated K<sup>+</sup> currents in glial cells of mouse hippocampal slices. *Pflugers Archiv European Journal of Physiology*, **1994**, 426, 310-9 4.6 96
- 1 Electrophysiologic characteristics of glial cells. *Hippocampus*, **1993**, 3, 113-123 3.5 25