Frank W Pfrieger

List of Publications by Year
in descending order

65 papers	9,687 citations	94269 37 h-index	110170 64 g-index
71 all docs	71 docs citations	71 times ranked	10548 citing authors

#	Article	IF	Citations
1	CNS Synaptogenesis Promoted by Glia-Derived Cholesterol. Science, 2001, 294, 1354-1357.	6.0	1,463
2	Reactive astrocyte nomenclature, definitions, and future directions. Nature Neuroscience, 2021, 24, 312-325.	7.1	1,098
3	Characterization of the signaling interactions that promote the survival and growth of developing retinal ganglion cells in culture. Neuron, 1995, 15, 805-819.	3.8	774
4	Synaptic Efficacy Enhanced by Glial Cells in Vitro. Science, 1997, 277, 1684-1687.	6.0	692
5	Origin of New Glial Cells in Intact and Injured Adult Spinal Cord. Cell Stem Cell, 2010, 7, 470-482.	5.2	533
6	Cholesterol metabolism in neurons and astrocytes. Progress in Lipid Research, 2011, 50, 357-371.	5.3	363
7	Cholesterol homeostasis and function in neurons of the central nervous system. Cellular and Molecular Life Sciences, 2003, 60, 1158-1171.	2.4	351
8	RBPJÎº-Dependent Signaling Is Essential for Long-Term Maintenance of Neural Stem Cells in the Adult Hippocampus. Journal of Neuroscience, 2010, 30, 13794-13807.	1.7	294
9	Outsourcing in the brain: Do neurons depend on cholesterol delivery by astrocytes?. BioEssays, 2003, 25, 72-78.	1.2	271
10	Multiple mechanisms mediate cholesterol-induced synaptogenesis in a CNS neuron. Molecular and Cellular Neurosciences, 2005, 29, 190-201.	1.0	263
11	Role of cholesterol in synapse formation and function. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1610, 271-280.	1.4	256
12	Calcium dynamics in astrocyte processes during neurovascular coupling. Nature Neuroscience, 2015, 18, 210-218.	7.1	235
13	Cholesterol in brain disease: sometimes determinant and frequently implicated. EMBO Reports, 2014, 15, 1036-1052.	2.0	224
14	Marked differences in cholesterol synthesis between neurons and glial cells from postnatal rats. Journal of Neurochemistry, 2009, 109, 125-134.	2.1	221
15	Synaptic Integration of Adult-Born Hippocampal Neurons Is Locally Controlled by Astrocytes. Neuron, 2015, 88, 957-972.	3.8	220
16	New roles for astrocytes: Regulation of CNS synaptogenesis. Trends in Neurosciences, 2003, 26, 531-535.	4.2	197
17	Gliaâ€derived signals induce synapse formation in neurones of the rat central nervous system. Journal of Physiology, 2001, 533, 665-679.	1.3	170
18	New views on synapseâ€”glia interactions. Current Opinion in Neurobiology, 1996, 6, 615-621.	2.0	143

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19	Transgenic mice for conditional gene manipulation in astroglial cells. Glia, 2007, 55, 1565-1576.	2.5	137
20	Kinetics of GABAB receptor-mediated inhibition of calcium currents and excitatory synaptic transmission in hippocampal neurons in vitro. Neuron, 1994, 12, 97-107.	3.8	112
21	Role of glial cells in the formation and maintenance of synapses. Brain Research Reviews, 2010, 63, 39-46.	9.1	108
22	Role of glia-derived cholesterol in synaptogenesis: new revelations in the synapseâ€“glia affair. Journal of Physiology (Paris), 2002, 96, 257-263.	2.1	101
23	Thematic Review Series: Exosomes and Microvesicles: Lipids as Key Components of their Biogenesis and Functions, Cholesterol and the journey of extracellular vesicles. Journal of Lipid Research, 2018, 59, 2255-2261.	2.0	94
24	Lack of Niemannâ€“Pick type C1 induces age-related degeneration in the mouse retina. Molecular and Cellular Neurosciences, 2010, 43, 164-176.	1.0	76
25	Role of astroglial connexin30 in hippocampal gap junction coupling. Glia, 2011, 59, 511-519.	2.5	73
26	Roles of glial cells in synapse development. Cellular and Molecular Life Sciences, 2009, 66, 2037-2047.	2.4	69
27	Relevance of Exocytotic Glutamate Release from Retinal Glia. Neuron, 2012, 74, 504-516.	3.8	69
28	What the fly's glia tell the fly's brain. Cell, 1995, 83, 671-674.	13.5	66
29	Pharmacological characterization of calcium currents and synaptic transmission between thalamic neurons in vitro. Journal of Neuroscience, 1992, 12, 4347-4357.	1.7	65
30	Isolation and characterization of living primary astroglial cells using the new GLASTâ€specific monoclonal antibody ACSAâ€1. Glia, 2012, 60, 894-907.	2.5	61
31	Role of glia in synapse development. Current Opinion in Neurobiology, 2002, 12, 486-490.	2.0	56
32	Migration Speed of Cajal-Retzius Cells Modulated by Vesicular Trafficking Controls the Size of Higher-Order Cortical Areas. Current Biology, 2015, 25, 2466-2478.	1.8	54
33	Glucocorticoid receptor in astrocytes regulates midbrain dopamine neurodegeneration through connexin hemichannel activity. Cell Death and Differentiation, 2019, 26, 580-596.	5.0	53
34	An autocrine purinergic signaling controls astrocyte-induced neuronal excitation. Scientific Reports, 2017, 7, 11280.	1.6	48
35	Altered Brain Cholesterol/Isoprenoid Metabolism in a Rat Model of Autism Spectrum Disorders. Neuroscience, 2018, 372, 27-37.	1.1	48
36	Regional variations in the glial influence on synapse development in the mouse CNS. Journal of Physiology, 2006, 577, 249-261.	1.3	47

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37	Genetic approaches to study glial cells in the rodent brain. Glia, 2012, 60, 681-701.	2.5	40
38	Purification of embryonic stem cellâ€derived neurons by immunoisolation. FASEB Journal, 2003, 17, 1-10.	0.2	37
39	Glia-induced neuronal differentiation by transcriptional regulation. Glia, 2007, 55, 1108-1122.	2.5	36
40	Astrocyte-derived Jagged-1 mitigates deleterious Notch signaling in amyotrophic lateral sclerosis. Neurobiology of Disease, 2018, 119, 26-40.	2.1	35
41	Loss of Mevalonate/Cholesterol Homeostasis in the Brain: A Focus on Autism Spectrum Disorder and Rett Syndrome. International Journal of Molecular Sciences, 2019, 20, 3317.	1.8	35
42	Synaptic plasticity, astrocytes and morphological homeostasis. Journal of Physiology (Paris), 2006, 99, 84-91.	2.1	34
43	Expression Patterns of Inducible Cre Recombinase Driven by Differential Astrocyte-Specific Promoters in Transgenic Mouse Lines. Neuroscience Bulletin, 2020, 36, 530-544.	1.5	33
44	CXCR4 prevents dispersion of granule neuron precursors in the adult dentate gyrus. Hippocampus, 2013, 23, 1345-1358.	0.9	31
45	Tanycytes control hypothalamic liraglutide uptake and its anti-obesity actions. Cell Metabolism, 2022, 34, 1054-1063.e7.	7.2	28
46	The formation of glutamatergic synapses in cultured central neurons: selective increase in miniature synaptic currents. Developmental Brain Research, 1994, 81, 77-88.	2.1	27
47	Modulation of the Isoprenoid/Cholesterol Biosynthetic Pathway During Neuronal Differentiation In Vitro. Journal of Cellular Biochemistry, 2016, 117, 2036-2044.	1.2	27
48	Reversal of Pathologic Lipid Accumulation in NPC1-Deficient Neurons by Drug-Promoted Release of LAMP1-Coated Lamellar Inclusions. Journal of Neuroscience, 2016, 36, 8012-8025.	1.7	26
49	Implication of neuropilin 2/semaphorin 3F in retinocollicular map formation. Developmental Dynamics, 2008, 237, 3394-3403.	0.8	24
50	Glial cells promote dendrite formation and the reception of synaptic input in Purkinje cells from postnatal mice. Glia, 2010, 58, 538-545.	2.5	24
51	Understanding and Treating Niemannâ€“Pick Type C Disease: Models Matter. International Journal of Molecular Sciences, 2020, 21, 8979.	1.8	20
52	The Role of Hypothalamic NF-ÎºB Signaling in the Response of the HPT-Axis to Acute Inflammation in Female Mice. Endocrinology, 2016, 157, 2947-2956.	1.4	19
53	Suppression of SNAREâ€dependent exocytosis in retinal glial cells and its effect on ischemiaâ€induced neurodegeneration. Glia, 2017, 65, 1059-1071.	2.5	17
54	A molecular mechanism for the topographic alignment of convergent neural maps. ELife, 2017, 6, .	2.8	17

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55	Relevance of neuronal and glial NPC1 for synaptic input to cerebellar Purkinje cells. Molecular and Cellular Neurosciences, 2014, 61, 65-71.	1.0	15
56	Mapping astrocyte activity domains by light sheet imaging and spatio-temporal correlation screening. NeuroImage, 2020, 220, 117069.	2.1	14
57	Neurodegenerative Diseases and Cholesterol: Seeing the Field Through the Players. Frontiers in Aging Neuroscience, 2021, 13, 766587.	1.7	13
58	Defective response inhibition and collicular noradrenaline enrichment in mice with duplicated retinotopic map in the superior colliculus. Brain Structure and Function, 2015, 220, 1573-1584.	1.2	8
59	Glial contribution to cyclodextrin-mediated reversal of cholesterol accumulation in murine NPC1-deficient neurons in vivo. Neurobiology of Disease, 2021, 158, 105469.	2.1	6
60	A link between cholesterol, synapse plasticity, degeneration and neurological disorders: Reinvention or integration?. BioEssays, 2003, 25, 736-737.	1.2	3
61	TeamTree analysis: A new approach to evaluate scientific production. PLoS ONE, 2021, 16, e0253847.	1.1	2
62	Letter from the Guest Editor. Cell Adhesion and Migration, 2009, 3, 27-28.	1.1	1
63	Role of astrocytes in the formation, maturation and maintenance of synapses. , 2004, , 417-436.		1
64	Response to Dr. Koudinov's letter. BioEssays, 2003, 25, 737-737.	1.2	0
65	Learning from Barres. Glia, 2018, 66, 1537-1541.	2.5	0