Milos Pekny

List of Publications by Year
in descending order

116	15,678	31902 53	23472 111
papers	citations	h-index	g-index

117	117	117	16317
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reactive astrocytes prevent maladaptive plasticity after ischemic stroke. Progress in Neurobiology, 2022, 209, 102199.	2.8	18
2	Roles of vimentin in health and disease. Genes and Development, 2022, 36, 391-407.	2.7	79
3	Reactive astrocyte nomenclature, definitions, and future directions. Nature Neuroscience, 2021, 24, 312-325.	7.1	1,098
4	Hyperactive Behavior and Altered Brain Morphology in Adult Complement C3a Receptor Deficient Mice. Frontiers in Immunology, 2021, 12, 604812.	2.2	18
5	Plasma neurofilament light chain levels predict improvement in late phase after stroke. European Journal of Neurology, 2021, 28, 2218-2228.	1.7	10
6	Neurofilament Light Chain (NfL) in Bloodâ€"A Biomarker Predicting Unfavourable Outcome in the Acute Phase and Improvement in the Late Phase after Stroke. Cells, 2021, 10, 1537.	1.8	18
7	The Complement System: A Powerful Modulator and Effector of Astrocyte Function in the Healthy and Diseased Central Nervous System. Cells, 2021, 10, 1812.	1.8	27
8	Targeting Complement C3a Receptor to Improve Outcome After Ischemic Brain Injury. Neurochemical Research, 2021, 46, 2626-2637.	1.6	15
9	Diet-induced weight loss in obese/diabetic mice normalizes glucose metabolism and promotes functional recovery after stroke. Cardiovascular Diabetology, 2021, 20, 240.	2.7	5
10	C3a Receptor Signaling Inhibits Neurodegeneration Induced by Neonatal Hypoxic-Ischemic Brain Injury. Frontiers in Immunology, 2021, 12, 768198.	2.2	8
11	Nestin Null Mice Show Improved Reversal Place Learning. Neurochemical Research, 2020, 45, 215-220.	1.6	6
12	Nestin affects fusion pore dynamics in mouse astrocytes. Acta Physiologica, 2020, 228, e13399.	1.8	10
13	Motor Function in the Late Phase After Stroke: Stroke Survivorsâ€™ Perspective. Annals of Rehabilitation Medicine, 2020, 44, 362-369.	0.6	5
14	Astrocyte activation and reactive gliosisâ€"A new target in stroke?. Neuroscience Letters, 2019, 689, 45-55.	1.0	150
15	Vimentin Phosphorylation Is Required for Normal Cell Division of Immature Astrocytes. Cells, 2019, 8, 1016.	1.8	15
16	The role of GFAP and vimentin in learning and memory. Biological Chemistry, 2019, 400, 1147-1156.	1.2	40
17	Vimentin is required for normal accumulation of body fat. Biological Chemistry, 2019, 400, 1157-1162.	1.2	13
18	Effects of horse-riding therapy and rhythm and music-based therapy on functional mobility in late phase after stroke. NeuroRehabilitation, 2019, 45, 483-492.	0.5	22

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19	Nestin Regulates Neurogenesis in Mice Through Notch Signaling From Astrocytes to Neural Stem Cells. Cerebral Cortex, 2019, 29, 4050-4066.	1.6	46
20	The cysteine residue of glial fibrillary acidic protein is a critical target for lipoxidation and required for efficient network organization. Free Radical Biology and Medicine, 2018, 120, 380-394.	1.3	27
21	Drugs targeting intermediate filaments can improve neurosupportive properties of astrocytes. Brain Research Bulletin, 2018, 136, 130-138.	1.4	5
22	Increased Neuronal Differentiation of Neural Progenitor Cells Derived from Phosphovimentin-Deficient Mice. Molecular Neurobiology, 2018, 55, 5478-5489.	1.9	22
23	Vimentin deficiency in macrophages induces increased oxidative stress and vascular inflammation but attenuates atherosclerosis in mice. Scientific Reports, 2018, 8, 16973.	1.6	43
24	Inflammation in the hippocampus affects IGF1 receptor signaling and contributes to neurological sequelae in rheumatoid arthritis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12063-E12072.	3.3	41
25	Attenuation of reactive gliosis in stroke-injured mouse brain does not affect neurogenesis from grafted human iPSC-derived neural progenitors. PLoS ONE, 2018, 13, e0192118.	1.1	11
26	The challenge of regenerative therapies for the optic nerve in glaucoma. Experimental Eye Research, 2017, 157, 28-33.	1.2	52
27	Long-Term Improvements After Multimodal Rehabilitation in Late Phase After Stroke. Stroke, 2017, 48, 1916-1924.	1.0	71
28	Injury Leads to the Appearance of Cells with Characteristics of Both Microglia and Astrocytes in Mouse and Human Brain. Cerebral Cortex, 2017, 27, 3360-3377.	1.6	26
29	Neural Progenitor Cells in Cerebral Cortex of Epilepsy Patients do not Originate from Astrocytes Expressing GLAST. Cerebral Cortex, 2016, 27, 5672-5682.	1.6	5
30	Targeting innate immunity for neurodegenerative disorders of the central nervous system. Journal of Neurochemistry, 2016, 138, 653-693.	2.1	106
31	Complement Peptide C3a Promotes Astrocyte Survival in Response to Ischemic Stress. Molecular Neurobiology, 2016, 53, 3076-3087.	1.9	34
32	Astrocytes: a central element in neurological diseases. Acta Neuropathologica, 2016, 131, 323-345.	3.9	597
33	Reactive gliosis in the pathogenesis of CNS diseases. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 483-491.	1.8	194
34	C3 deficiency ameliorates the negative effects of irradiation of the young brain on hippocampal development and learning. Oncotarget, 2016, 7, 19382-19394.	0.8	21
35	Heterogeneity of Notch signaling in astrocytes and the effects of <scp>GFAP</scp> and vimentin deficiency. Journal of Neurochemistry, 2015, 135, 234-248.	2.1	33
36	GFAP and vimentin deficiency alters gene expression in astrocytes and microglia in wildâ€type mice and changes the transcriptional response of reactive glia in mouse model for <scp>A</scp>lzheimer's disease. Glia, 2015, 63, 1036-1056.	2.5	134

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37	Glial fibrillary acidic protein (GFAP) and the astrocyte intermediate filament system in diseases of the central nervous system. Current Opinion in Cell Biology, 2015, 32, 121-130.	2.6	602
38	Retinal functional alterations in mice lacking intermediate filament proteins glial fibrillary acidic protein and vimentin. FASEB Journal, 2015, 29, 4815-4828.	0.2	26
39	Classification of Subpopulations of Cells Within Human Primary Brain Tumors by Single Cell Gene Expression Profiling. Neurochemical Research, 2015, 40, 336-352.	1.6	6
40	Short general anaesthesia induces prolonged changes in gene expression in the mouse hippocampus. Acta Anaesthesiologica Scandinavica, 2014, 58, 1127-1133.	0.7	26
41	<scp>HB</scp>â€<scp>EGF</scp> affects astrocyte morphology, proliferation, differentiation, and the expression of intermediate filament proteins. Journal of Neurochemistry, 2014, 128, 878-889.	2.1	43
42	Beneficial effects of gfap/vimentin reactive astrocytes for axonal remodeling and motor behavioral recovery in mice after stroke. Glia, 2014, 62, 2022-2033.	2.5	163
43	The dual role of astrocyte activation and reactive gliosis. Neuroscience Letters, 2014, 565, 30-38.	1.0	555
44	A Novel Method for Three-Dimensional Culture of Central Nervous System Neurons. Tissue Engineering - Part C: Methods, 2014, 20, 485-492.	1.1	28
45	Synemin is expressed in reactive astrocytes and Rosenthal fibers in Alexander disease. Apmis, 2014, 122, 76-80.	0.9	24
46	Glia in the pathogenesis of neurodegenerative diseases. Biochemical Society Transactions, 2014, 42, 1291-1301.	1.6	130
47	Astrocyte Reactivity and Reactive Astrogliosis: Costs and Benefits. Physiological Reviews, 2014, 94, 1077-1098.	13.1	701
48	Intermediate filaments are important for astrocyte response to oxidative stress induced by oxygenâ€“glucose deprivation and reperfusion. Histochemistry and Cell Biology, 2013, 140, 81-91.	0.8	90
49	Astrocytoma grade IV (glioblastoma multiforme) displays 3 subtypes with unique expression profiles of intermediate filament proteins. Human Pathology, 2013, 44, 2081-2088.	1.1	43
50	Bioactive 3D cell culture system minimizes cellular stress and maintains the in vivoâ€like morphological complexity of astroglial cells. Glia, 2013, 61, 432-440.	2.5	100
51	Receptor for complement peptide C3a: a therapeutic target for neonatal hypoxicâ€ischemic brain injury. FASEB Journal, 2013, 27, 3797-3804.	0.2	48
52	Attenuating astrocyte activation accelerates plaque pathogenesis in APP/PS1 mice. FASEB Journal, 2013, 27, 187-198.	0.2	254
53	Direct Cell Lysis for Single-Cell Gene Expression Profiling. Frontiers in Oncology, 2013, 3, 274.	1.3	49
54	Plasticity Response in the Contralesional Hemisphere after Subtle Neurotrauma: Gene Expression Profiling after Partial Deafferentation of the Hippocampus. PLoS ONE, 2013, 8, e70699.	1.1	26

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55	Reactive Astrocytes, Astrocyte Intermediate Filament Proteins, and Their Role in the Disease Pathogenesis. Neuromethods, 2013, , 299-319.	0.2	4
56	Versatile and Simple Approach to Determine Astrocyte Territories in Mouse Neocortex and Hippocampus. PLoS ONE, 2013, 8, e69143.	1.1	79
57	Axonal Regeneration after Sciatic Nerve Lesion Is Delayed but Complete in GFAP- and Vimentin-Deficient Mice. PLoS ONE, 2013, 8, e79395.	1.1	33
58	Modulation of Neural Plasticity as a Basis for Stroke Rehabilitation. Stroke, 2012, 43, 2819-2828.	1.0	220
59	Reduced removal of synaptic terminals from axotomized spinal motoneurons in the absence of complement C3. Experimental Neurology, 2012, 237, 8-17.	2.0	50
60	Astrocytes Negatively Regulate Neurogenesis Through the Jagged1â€Mediated Notch Pathway. Stem Cells, 2012, 30, 2320-2329.	1.4	123
61	The effects of a rhythm and music-based therapy program and therapeutic riding in late recovery phase following stroke: a study protocol for a three-armed randomized controlled trial. BMC Neurology, 2012, 12, 141.	0.8	24
62	IFN-Î³-induced increase in the mobility of MHC class II compartments in astrocytes depends on intermediate filaments. Journal of Neuroinflammation, 2012, 9, 144.	3.1	95
63	Glial cells in (patho)physiology. Journal of Neurochemistry, 2012, 121, 4-27.	2.1	460
64	Photothrombosis-Induced Infarction of the Mouse Cerebral Cortex Is Not Affected by the Nrf2-Activator Sulforaphane. PLoS ONE, 2012, 7, e41090.	1.1	46
65	Unique gene expression patterns indicate microglial contribution to neural stem cell recovery following irradiation. Molecular and Cellular Neurosciences, 2011, 46, 710-719.	1.0	21
66	The Role of Attenuated Astrocyte Activation in Infantile Neuronal Ceroid Lipofuscinosis. Journal of Neuroscience, 2011, 31, 15575-15585.	1.7	94
67	Defining cell populations with single-cell gene expression profiling: correlations and identification of astrocyte subpopulations. Nucleic Acids Research, 2011, 39, e24-e24.	6.5	90
68	Reactive glial cells: increased stiffness correlates with increased intermediate filament expression. FASEB Journal, 2011, 25, 624-631.	0.2	148
69	Intermediate filaments attenuate stimulationâ€dependent mobility of endosomes/lysosomes in astrocytes. Glia, 2010, 58, 1208-1219.	2.5	82
70	Expression of plasminogen activator inhibitorâ€1 and protease nexinâ€1 in human astrocytes: Response to injuryâ€related factors. Journal of Neuroscience Research, 2010, 88, 2441-2449.	1.3	26
71	Attenuation of Reactive Gliosis Does Not Affect Infarct Volume in Neonatal Hypoxic-Ischemic Brain Injury in Mice. PLoS ONE, 2010, 5, e10397.	1.1	57
72	Complement-Derived Anaphylatoxin C3a Regulates In Vitro Differentiation and Migration of Neural Progenitor Cells. Stem Cells, 2009, 27, 2824-2832.	1.4	142

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73	Intermediate filaments regulate astrocyte motility. Journal of Neurochemistry, 2008, 79, 617-625.	2.1	142
74	Protective Role of Reactive Astrocytes in Brain Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 468-481.	2.4	441
75	Abnormal Reactivity of Mulˆller Cells after Retinal Detachment in Mice Deficient in GFAP and Vimentin. , 2008, 49, 3659.		104
76	Synemin is expressed in reactive astrocytes in neurotrauma and interacts differentially with vimentin and GFAP intermediate filament networks. Journal of Cell Science, 2007, 120, 1267-1277.	1.2	90
77	Enriched environment and astrocytes in central nervous system regeneration. Acta Dermato-Venereologica, 2007, 39, 345-352.	0.6	36
78	14-3-3 Expression in Denervated Hippocampus after Entorhinal Cortex Lesion Assessed by Culture-Derived Isotope Tags in Quantitative Proteomics. Journal of Proteome Research, 2007, 6, 3491-3500.	1.8	9
79	Increased Neurogenesis and Astrogenesis from Neural Progenitor Cells Grafted in the Hippocampus of GFAPâ^'/â^'Vimâ^'/â^' Mice. Stem Cells, 2007, 25, 2619-2627.	1.4	93
80	The Role of Astrocytes and Complement System in Neural Plasticity. International Review of Neurobiology, 2007, 82, 95-111.	0.9	148
81	Attenuated Glial Reactions and Photoreceptor Degeneration after Retinal Detachment in Mice Deficient in Glial Fibrillary Acidic Protein and Vimentin. , 2007, 48, 2760.		149
82	Signaling through C5aR is not involved in basal neurogenesis. Journal of Neuroscience Research, 2007, 85, 2892-2897.	1.3	27
83	Cytoskeleton and Vesicle Mobility in Astrocytes. Traffic, 2007, 8, 12-20.	1.3	147
84	Intermediate filaments and stress. Experimental Cell Research, 2007, 313, 2244-2254.	1.2	157
85	Dynamics of mutated GFAP aggregates revealed by real-time imaging of an astrocyte model of Alexander disease. Experimental Cell Research, 2007, 313, 2766-2779.	1.2	43
86	Complement: a novel factor in basal and ischemia-induced neurogenesis. EMBO Journal, 2006, 25, 1364-1374.	3.5	242
87	Redefining the concept of reactive astrocytes as cells that remain within their unique domains upon reaction to injury. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17513-17518.	3.3	499
88	Astrocyte activation and reactive gliosis. Glia, 2005, 50, 427-434.	2.5	1,384
89	Re-establishing the regenerative potential of central nervous system axons in postnatal mice. Journal of Cell Science, 2005, 118, 863-872.	1.2	144
90	Under stress, the absence of intermediate filaments from Mulˆller cells in the retina has structural and functional consequences. Journal of Cell Science, 2004, 117, 3481-3488.	1.2	131

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91	Stress Models for the Study of Intermediate Filament Function. Methods in Cell Biology, 2004, 78, 229-264.	0.5	7
92	Increased Cell Proliferation and Neurogenesis in the Hippocampal Dentate Gyrus of Old GFAP?/?Vim?/? Mice. Neurochemical Research, 2004, 29, 2069-2073.	1.6	99
93	Astrocyte intermediate filaments in CNS pathologies and regeneration. Journal of Pathology, 2004, 204, 428-437.	2.1	352
94	Absence of Glial Fibrillary Acidic Protein and Vimentin Prevents Hypertrophy of Astrocytic Processes and Improves Post-Traumatic Regeneration. Journal of Neuroscience, 2004, 24, 5016-5021.	1.7	393
95	Bfsp2 mutation found in mouse 129 strains causes the loss of CP49â€™ and induces vimentin-dependent changes in the lens fibre cell cytoskeleton. Experimental Eye Research, 2004, 78, 875-889.	1.2	46
96	Response to Quinlan and Nilsson: Astroglia sitting at the controls?. Trends in Neurosciences, 2004, 27, 243-244.	4.2	16
97	Neuron-Specific Ablation of PDGF-B Is Compatible with Normal Central Nervous System Development and Astroglial Response to Injury. Neurochemical Research, 2003, 28, 271-279.	1.6	34
98	Consequences of eliminating adenosine A1receptors in mice. Drug Development Research, 2003, 58, 350-353.	1.4	0
99	Loss of GFAP expression in high-grade astrocytomas does not contribute to tumor development or progression. Oncogene, 2003, 22, 3407-3411.	2.6	56
100	Robust neural integration from retinal transplants in mice deficient in GFAP and vimentin. Nature Neuroscience, 2003, 6, 863-868.	7.1	220
101	Mice lacking the adenosine A1receptor are anxious and aggressive, but are normal learners with reduced muscle strength and survival rate. European Journal of Neuroscience, 2002, 16, 547-550.	1.2	169
102	Effect of elevated K+, hypotonic stress, and cortical spreading depression on astrocyte swelling in GFAP-deficient mice. Glia, 2001, 35, 189-203.	2.5	61
103	Formation of normal desmin intermediate filaments in mouse hepatic stellate cells requires vimentin. Hepatology, 2001, 33, 177-188.	3.6	59
104	Astrocytic intermediate filaments: lessons from GFAP and vimentin knock-out mice. Progress in Brain Research, 2001, 132, 23-30.	0.9	82
105	Vascular Endothelial Growth Factor-Bâ€“Deficient Mice Display an Atrial Conduction Defect. Circulation, 2001, 104, 358-364.	1.6	150
106	Intermediate Filament Protein Partnership in Astrocytes. Journal of Biological Chemistry, 1999, 274, 23996-24006.	1.6	313
107	Abnormal Reaction to Central Nervous System Injury in Mice Lacking Glial Fibrillary Acidic Protein and Vimentin. Journal of Cell Biology, 1999, 145, 503-514.	2.3	360
108	The impact of genetic removal of GFAP and/or vimentin on glutamine levels and transport of glucose and ascorbate in astrocytes. Neurochemical Research, 1999, 24, 1357-1362.	1.6	48

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109	Class VI intermediate filament protein nestin is induced during activation of rat hepatic stellate cells. Hepatology, 1999, 29, 520-527.	3.6	263
110	Impaired induction of blood-brain barrier properties in aortic endothelial cells by astrocytes from GFAB-deficient mice. , 1998, 22, 390-400.		105
111	Altered taurine release following hypotonic stress in astrocytes from mice deficient for GFAP and vimentin. Molecular Brain Research, 1998, 62, 77-81.	2.5	78
112	Increased Insulin Secretion and Glucose Tolerance in Mice Lacking Islet Amyloid Polypeptide (Amylin). Biochemical and Biophysical Research Communications, 1998, 250, 271-277.	1.0	149
113	GFAP-Deficient Astrocytes Are Capable of Stellationin VitroWhen Cocultured with Neurons and Exhibit a Reduced Amount of Intermediate Filaments and an Increased Cell Saturation Density. Experimental Cell Research, 1998, 239, 332-343.	1.2	96
114	Impaired induction of blood-brain barrier properties in aortic endothelial cells by astrocytes from GFAB-deficient mice. , 1998, 22, 390.		1
115	PDGF-A Signaling Is a Critical Event in Lung Alveolar Myofibroblast Development and Alveogenesis. Cell, 1996, 85, 863-873.	13.5	787
116	Differences in Binding to the Solid Substratum and Extracellular Matrix may Explain Isoform-Specific Paracrine Effects of Platelet-Derived Growth Factor. Growth Factors, 1994, 10, 77-87.	0.5	12