Michel Khrestchatisky

List of Publications by Year
in descending order

68 papers	4,811 citations	101496 36 h-index	95218 68 g-index
69 all docs	69 docs citations	69 times ranked	7703 citing authors

#	Article	IF	Citations
1	Synthetic therapeutic peptides: science and market. Drug Discovery Today, 2010, 15, 40-56.	3.2	1,215
2	The Human Nose Harbors a Niche of Olfactory Ectomesenchymal Stem Cells Displaying Neurogenic and Osteogenic Properties. Stem Cells and Development, 2010, 19, 853-866.	1.1	205
3	Metzincin Proteases and Their Inhibitors: Foes or Friends in Nervous System Physiology?. Journal of Neuroscience, 2010, 30, 15337-15357.	1.7	204
4	Neuronal activity-dependent increase of net matrix metalloproteinase activity is associated with MMP-9 neurotoxicity after kainate. European Journal of Neuroscience, 2003, 18, 1507-1517.	1.2	161
5	Temporal gene profiling of the 5XFAD transgenic mouse model highlights the importance of microglial activation in Alzheimerâ€™s disease. Molecular Neurodegeneration, 2014, 9, 33.	4.4	138
6	Tissue Inhibitor of Metalloproteinases-1 (TIMP-1) Is Differentially Induced in Neurons and Astrocytes after Seizures: Evidence for Developmental, Immediate Early Gene, and Lesion Response. Journal of Neuroscience, 1997, 17, 4223-4235.	1.7	133
7	Gelatinase B and TIMP-1 are regulated in a cell- and time-dependent manner in association with neuronal death and glial reactivity after global forebrain ischemia. European Journal of Neuroscience, 2002, 15, 19-32.	1.2	132
8	TWEAK is expressed by glial cells, induces astrocyte proliferation and increases EAE severity. Journal of Neuroimmunology, 2002, 133, 116-123.	1.1	122
9	Matrix metalloproteinase-2 (MMP-2) regulates astrocyte motility in connection with the actin cytoskeleton and integrins. Glia, 2006, 54, 272-284.	2.5	116
10	Cholecalciferol (Vitamin D3) Improves Myelination and Recovery after Nerve Injury. PLoS ONE, 2013, 8, e65034.	1.1	108
11	Differential vesicular distribution and trafficking of MMPâ€2, MMPâ€9, and their inhibitors in astrocytes. Glia, 2010, 58, 344-366.	2.5	105
12	Engraftment of human nasal olfactory stem cells restores neuroplasticity in mice with hippocampal lesions. Journal of Clinical Investigation, 2011, 121, 2808-2820.	3.9	101
13	MT5-MMP is a new pro-amyloidogenic proteinase that promotes amyloid pathology and cognitive decline in a transgenic mouse model of Alzheimerâ€™s disease. Cellular and Molecular Life Sciences, 2016, 73, 217-236.	2.4	96
14	Vitamin D₂Potentiates Axon Regeneration. Journal of Neurotrauma, 2008, 25, 1247-1256.	1.7	93
15	Onset of hippocampusâ€dependent memory impairments in 5XFAD transgenic mouse model of Alzheimer's disease. Hippocampus, 2014, 24, 762-772.	0.9	89
16	Vesicular trafficking and secretion of matrix metalloproteinases-2, -9 and tissue inhibitor of metalloproteinases-1 in neuronal cells. Molecular and Cellular Neurosciences, 2008, 39, 549-568.	1.0	84
17	RAGEâ€"TXNIP axis is required for S100B-promoted Schwann cell migration, fibronectin expression and cytokine secretion. Journal of Cell Science, 2010, 123, 4332-4339.	1.2	79
18	Evidence for Early Cognitive Impairment Related to Frontal Cortex in the 5XFAD Mouse Model of Alzheimer's Disease. Journal of Alzheimer's Disease, 2013, 33, 781-796.	1.2	79

#	Article	IF	Citations
19	Area-Specific Alterations of Synaptic Plasticity in the 5XFAD Mouse Model of Alzheimerâ€™s Disease: Dissociation between Somatosensory Cortex and Hippocampus. PLoS ONE, 2013, 8, e74667.	1.1	78
20	Tissue inhibitor of metalloproteinasesâ€1 (TIMPâ€1) modulates neuronal death, axonal plasticity, and learning and memory. European Journal of Neuroscience, 2005, 22, 2569-2578.	1.2	75
21	Medicinal Chemistry Based Approaches and Nanotechnologyâ€Based Systems to Improve <scp>CNS</scp> Drug Targeting and Delivery. Medicinal Research Reviews, 2013, 33, 457-516.	5.0	74
22	Metalloproteinases and their tissue inhibitors in Alzheimerâ€™s disease and other neurodegenerative disorders. Cellular and Molecular Life Sciences, 2019, 76, 3167-3191.	2.4	73
23	Chemical Optimization of New Ligands of the Low-Density Lipoprotein Receptor as Potential Vectors for Central Nervous System Targeting. Journal of Medicinal Chemistry, 2012, 55, 2227-2241.	2.9	71
24	Use of LDL receptorâ€"targeting peptide vectors for in vitro and in vivo cargo transport across the bloodâ€brain barrier. FASEB Journal, 2017, 31, 1807-1827.	0.2	68
25	Differential spatio-temporal regulation of MMPs in the 5xFAD mouse model of AlzheimerÃ¢â‚¬â„¢s disease: evidence for a pro-amyloidogenic role of MT1-MMP. Frontiers in Aging Neuroscience, 2014, 6, 247.	1.7	60
26	Developmental vitamin D deficiency alters learning in C57Bl/6J mice. Behavioural Brain Research, 2010, 208, 603-608.	1.2	59
27	TWEAK/Fn14 pathway modulates properties of a human microvascular endothelial cell model of blood brain barrier. Journal of Neuroinflammation, 2013, 10, 9.	3.1	56
28	Tissue inhibitor of matrix metalloproteinases-1 loaded poly(lactic-co-glycolic acid) nanoparticles for delivery across the blood–brain barrier. International Journal of Nanomedicine, 2014, 9, 575.	3.3	50
29	A New Role for TIMP-1 in Modulating Neurite Outgrowth and Morphology of Cortical Neurons. PLoS ONE, 2009, 4, e8289.	1.1	49
30	Severity of experimental autoimmune encephalomyelitis is unexpectedly reduced in mice born to vitamin D-deficient mothers. Journal of Steroid Biochemistry and Molecular Biology, 2010, 121, 250-253.	1.2	47
31	Olfactory Stem Cells, a New Cellular Model for Studying Molecular Mechanisms Underlying Familial Dysautonomia. PLoS ONE, 2010, 5, e15590.	1.1	46
32	Setting-up an In Vitro Model of Rat Blood-brain Barrier (BBB): A Focus on BBB Impermeability and Receptor-mediated Transport. Journal of Visualized Experiments, 2014, , e51278.	0.2	46
33	Role of Matrix Metalloproteinases in Migration and Neurotrophic Properties of Nasal Olfactory Stem and Ensheathing Cells. Cell Transplantation, 2013, 22, 993-1010.	1.2	41
34	Trafficking and secretion of matrix metalloproteinaseâ€2 in olfactory ensheathing glial cells: A role in cell migration?. Glia, 2011, 59, 750-770.	2.5	40
35	LRP-1â€"CD44, a New Cell Surface Complex Regulating Tumor Cell Adhesion. Molecular and Cellular Biology, 2012, 32, 3293-3307.	1.1	40
36	Endogenous and synthetic MMP inhibitors in CNS physiopathology. Progress in Brain Research, 2014, 214, 313-351.	0.9	39

#	Article	IF	Citations
37	Low-Density Lipoprotein Receptor-Related Protein-1 Mediates Endocytic Clearance of Tissue Inhibitor of Metalloproteinases-1 and Promotes Its Cytokine-Like Activities. PLoS ONE, 2014, 9, e103839.	1.1	35
38	MT5-MMP Promotes Alzheimerâ€™s Pathogenesis in the Frontal Cortex of 5xFAD Mice and APP Trafficking in vitro. Frontiers in Molecular Neuroscience, 2016, 9, 163.	1.4	34
39	TWEAK is expressed at the cell surface of monocytes during multiple sclerosis. Journal of Leukocyte Biology, 2009, 85, 132-135.	1.5	33
40	The Potential Role of Metalloproteinases in Neurogenesis in the Gerbil Hippocampus Following Global Forebrain Ischemia. PLoS ONE, 2011, 6, e22465.	1.1	28
41	MT5-MMP, just a new APP processing proteinase in Alzheimerâ€™s disease?. Journal of Neuroinflammation, 2016, 13, 167.	3.1	26
42	Isolation and characterization of olfactory ecto-mesenchymal stem cells from eight mammalian genera. BMC Veterinary Research, 2018, 14, 17.	0.7	26
43	Proamyloidogenic effects of membrane type 1 matrix metalloproteinase involve MMPâ€2 and BACEâ€1 activities, and the modulation of APP trafficking. FASEB Journal, 2019, 33, 2910-2927.	0.2	25
44	Astrocyte reactivity to Fas activation is attenuated in TIMP-1 deficient mice, an in vitro study. BMC Neuroscience, 2005, 6, 68.	0.8	24
45	A unique method for the isolation of nasal olfactory stem cells in living rats. Stem Cell Research, 2014, 12, 673-679.	0.3	24
46	Identification of LRP-1 as an endocytosis and recycling receptor for Î²1-integrin in thyroid cancer cells. Oncotarget, 2017, 8, 78614-78632.	0.8	24
47	Resuscitation of Newborn Piglets. Short-Term Influence of FiO2 on Matrix Metalloproteinases, Caspase-3 and BDNF. PLoS ONE, 2010, 5, e14261.	1.1	21
48	Peptide-based vectors for bloodâ€"brain barrier targeting and delivery of drugs to the central nervous system. Therapeutic Delivery, 2010, 1, 489-494.	1.2	20
49	Cholecalciferol (vitamin D 3) improves functional recovery when delivered during the acute phase after a spinal cord trauma. Journal of Steroid Biochemistry and Molecular Biology, 2015, 154, 23-31.	1.2	19
50	From Blood to Lesioned Brain: An In Vitro Study on Migration Mechanisms of Human Nasal Olfactory Stem Cells. Stem Cells International, 2017, 2017, 1-17.	1.2	18
51	Can the benefits of cannabinoid receptor stimulation on neuroinflammation, neurogenesis and memory during normal aging be useful in AD prevention?. Journal of Neuroinflammation, 2012, 9, 10.	3.1	15
52	Drebrin A expression is altered after pilocarpineâ€induced seizures: Time course of changes is consistent for a role in the integrity and stability of dendritic spines of hippocampal granule cells. Hippocampus, 2012, 22, 477-493.	0.9	14
53	Optimization and <i>in Vivo</i> Validation of Peptide Vectors Targeting the LDL Receptor. Molecular Pharmaceutics, 2016, 13, 4094-4105.	2.3	14
54	Grafts of Olfactory Stem Cells Restore Breathing and Motor Functions after Rat Spinal Cord Injury. Journal of Neurotrauma, 2018, 35, 1765-1780.	1.7	14

#	ARTICLE	IF	CITATIONS
55	Mapping of Domains on HIV Envelope Protein Mediating Association with Calnexin and Protein-disulfide Isomerase. Journal of Biological Chemistry, 2010, 285, 13788-13796.	1.6	13
56	Global cerebral ischemia in rats leads to amnesia due to selective neuronal death followed by astroglial scar formation in the CA1 layer. Neurobiology of Learning and Memory, 2017, 141, 168-178.	1.0	13
57	Syngeneic Transplantation of Olfactory Ectomesenchymal Stem Cells Restores Learning and Memory Abilities in a Rat Model of Global Cerebral Ischemia. Stem Cells International, 2018, 2018, 1-10.	1.2	13
58	High levels of serum soluble TWEAK are associated with neuroinflammation during multiple sclerosis. Journal of Translational Medicine, 2019, 17, 51.	1.8	13
59	Gene expression comparison reveals distinct basal expression of HOX members and differential TNF-induced response between brain- and spinal cord-derived microvascular endothelial cells. Journal of Neuroinflammation, 2016, 13, 290.	3.1	12
60	Long-Term Pantethine Treatment Counteracts Pathologic Gene Dysregulation and Decreases Alzheimer's Disease Pathogenesis in a Transgenic Mouse Model. Neurotherapeutics, 2019, 16, 1237-1254.	2.1	9
61	Identification and characterization of highly versatile peptide-vectors that bind non-competitively to the low-density lipoprotein receptor for in vivo targeting and delivery of small molecules and protein cargos. PLoS ONE, 2018, 13, e0191052.	1.1	9
62	MT5-MMP promotes neuroinflammation, neuronal excitability and Aî² production in primary neuron/astrocyte cultures from the 5xFAD mouse model of Alzheimerâ€™s disease. Journal of Neuroinflammation, 2022, 19, 65.	3.1	9
63	The FVB/N mice: A well suited strain to study learning and memory processes using olfactory cues. Behavioural Brain Research, 2016, 296, 254-259.	1.2	8
64	Neurotensin receptor 2 is induced in astrocytes and brain endothelial cells in relation to neuroinflammation following pilocarpineâ€induced seizures in rats. Glia, 2021, 69, 2618-2643.	2.5	8
65	MT5â€MMP controls APP and Î²â€CTF/C99 metabolism through proteolyticâ€dependent and â€independent mechanisms relevant for Alzheimer's disease. FASEB Journal, 2021, 35, e21727.	0.2	6
66	LDL receptor-peptide conjugate as in vivo tool for specific targeting of pancreatic ductal adenocarcinoma. Communications Biology, 2021, 4, 987.	2.0	6
67	The actin binding protein Î±-actinin-2 expression is associated with dendritic spine plasticity and migrating granule cells in the rat dentate gyrus following pilocarpine-induced seizures. Experimental Neurology, 2021, 335, 113512.	2.0	5
68	The Helico Maze allows testing of early learning and subcategories of long-term memory in mice. Behavioural Brain Research, 2021, 406, 113242.	1.2	1