CITATION REPORT List of articles citing

Matrix metalloproteinase-mediated disruption of tight junction proteins in cerebral vessels is reversed by synthetic matrix metalloproteinase inhibitor in focal ischemia in rat

DOI: 10.1038/sj.jcbfm.9600375 Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 697-709.

Source: https://exaly.com/paper-pdf/42817157/citation-report.pdf

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
846	Cyclooxygenase inhibition limits blood-brain barrier disruption following intracerebral injection of tumor necrosis factor-alpha in the rat. 2007 , 323, 488-98		135
845	Anti-high mobility group box 1 monoclonal antibody ameliorates brain infarction induced by transient ischemia in rats. 2007 , 21, 3904-16		293
844	The biochemical, biological, and pathological kaleidoscope of cell surface substrates processed by matrix metalloproteinases. 2007 , 42, 113-85		282
843	Vasogenic edema due to tight junction disruption by matrix metalloproteinases in cerebral ischemia. 2007 , 22, E4		245
842	Hypoxia disrupts the barrier function of neural blood vessels through changes in the expression of claudin-5 in endothelial cells. 2007 , 170, 1389-97		184
841	Astrocytesfriends or foes in multiple sclerosis?. 2007 , 55, 1300-12		212
840	Dexamethasone induces the expression of metalloproteinase inhibitor TIMP-1 in the murine cerebral vascular endothelial cell line cEND. 2007 , 580, 937-49		68
839	Matrix metalloproteinase inhibitors as therapy for inflammatory and vascular diseases. 2007 , 6, 480-98		577
838	Deleterious effects of dihydrotestosterone on cerebral ischemic injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007 , 27, 1553-62	7.3	88
837	Pathologically activated therapeutics for neuroprotection. 2007 , 8, 803-8		211
836	Occludin is overexpressed in Alzheimer's disease and vascular dementia. 2007 , 11, 569-79		41
835	Serum level of MMP-2, MMP-9 and Ox-LDL in Alzheimer's disease with hyperlipoidemia. 2007 , 22, 352-3	56	5
834	Moderate and severe traumatic brain injury induce early overexpression of systemic and brain gelatinases. 2008 , 34, 1384-92		68
833	Manufactured aluminum oxide nanoparticles decrease expression of tight junction proteins in brain vasculature. 2008 , 3, 286-95		184
832	Immunohistochemical analysis of adhesion molecules and matrix metalloproteinases in malignant CNS lymphomas: a study comparing primary CNS malignant and CNS intravascular lymphomas. 2008 , 25, 73-8		42
831	Tight junctions and the modulation of barrier function in disease. 2008 , 130, 55-70		420
830	Peripheral nerve pericytes originating from the blood-nerve barrier expresses tight junctional molecules and transporters as barrier-forming cells. 2008 , 217, 388-99		87

(2008-2008)

829	A novel method to establish microglia-free astrocyte cultures: comparison of matrix metalloproteinase expression profiles in pure cultures of astrocytes and microglia. 2008 , 56, 1187-98		67
828	The epithelial membrane protein 1 is a novel tight junction protein of the blood-brain barrier. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 1249-60	7.3	44
827	Tissue inhibitor of metalloproteinases protect blood-brain barrier disruption in focal cerebral ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 1674-85	7.3	109
826	Oxidative stress through activation of NAD(P)H oxidase in hypertensive mice with spontaneous intracranial hemorrhage. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 1175-85	7.3	26
825	Early beneficial effect of matrix metalloproteinase inhibition on blood-brain barrier permeability as measured by magnetic resonance imaging countered by impaired long-term recovery after stroke in rat brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 431-8	7.3	93
824	Matrix metalloproteinase inhibition facilitates cell death in intracerebral hemorrhage in mouse. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 752-63	7.3	52
823	The blood-brain barrier in migraine treatment. 2008 , 28, 1245-58		63
822	Normobaric hyperoxia inhibits NADPH oxidase-mediated matrix metalloproteinase-9 induction in cerebral microvessels in experimental stroke. 2008 , 107, 1196-205		86
821	Multiple expression of matrix metalloproteinases in murine neurocysticercosis: Implications for leukocyte migration through multiple central nervous system barriers. 2008 , 1214, 145-58		29
820	Reduction of hemorrhagic transformation by PJ34, a poly(ADP-ribose)polymerase inhibitor, after permanent focal cerebral ischemia in mice. 2008 , 588, 52-7		40
819	Strategies to advance translational research into brain barriers. 2008, 7, 84-96		370
818	Blood-brain barrier tight junction permeability and ischemic stroke. 2008 , 32, 200-19		678
817	Nimesulide as a promising neuroprotectant in brain ischemia: new experimental evidences. 2008 , 57, 266-73		35
816	Blocking connexin43 expression reduces inflammation and improves functional recovery after spinal cord injury. 2008 , 39, 152-60		154
815	New insights into mechanism for the effect of resveratrol preconditioning against cerebral ischemic stroke: Possible role of matrix metalloprotease-9. 2008 , 70, 52-5		8
814	The blood-brain barrier in health and chronic neurodegenerative disorders. 2008 , 57, 178-201		2229
813	Brain regional and cellular localization of gelatinase activity in rat that have undergone transient middle cerebral artery occlusion. 2008 , 152, 8-17		56
812	Claudin-5 levels are reduced in human end-stage cardiomyopathy. 2008 , 45, 81-7		24

811	Pcbs and tight junction expression. 2008 , 25, 234-40	24
810	The role of p53 in brain edema after 24 h of experimental subarachnoid hemorrhage in a rat model. 2008 , 214, 37-46	44
809	Matrix metalloproteinases and inflammatory diseases of the central nervous system. 2008, 123-152	
808	Single-nucleotide polymorphisms of MMP-2 gene in stroke subtypes. 2008 , 26, 113-9	34
807	Vascular endothelium and the blood-brain barrier. 2009 , 92, 197-214	4
806	Beta-hematin interaction with the hemopexin domain of gelatinase B/MMP-9 provokes autocatalytic processing of the propeptide, thereby priming activation by MMP-3. 2008 , 47, 2689-99	51
805	Elevated MMP Expression in the MRL Mouse Retina Creates a Permissive Environment for Retinal Regeneration. 2008 , 49, 1686-95	46
804	Induction of mmp-9 expression and endothelial injury by oxidative stress after spinal cord injury. 2008 , 25, 184-95	98
803	Systemic inflammation alters the kinetics of cerebrovascular tight junction disruption after experimental stroke in mice. 2008 , 28, 9451-62	243
802	Experimental models in intracerebral hemorrhage. 2009 , 92, 307-24	3
802	Experimental models in intracerebral hemorrhage. 2009 , 92, 307-24 Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008 , 88, 211-47	3
801	Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008 , 88, 211-47	194
801	Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008, 88, 211-47 Matrix Metalloproteinases in Tissue Remodelling and Inflammation. 2008,	194 5
801 800 799	Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008, 88, 211-47 Matrix Metalloproteinases in Tissue Remodelling and Inflammation. 2008, Extension of the thrombolytic time window with minocycline in experimental stroke. 2008, 39, 3372-7 Reperfusion-associated hemorrhagic transformation in SHR rats: evidence of symptomatic	194 5 180
801 800 799 798	Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008, 88, 211-47 Matrix Metalloproteinases in Tissue Remodelling and Inflammation. 2008, Extension of the thrombolytic time window with minocycline in experimental stroke. 2008, 39, 3372-7 Reperfusion-associated hemorrhagic transformation in SHR rats: evidence of symptomatic parenchymal hematoma. 2008, 39, 3405-10	194 5 180 25
801 800 799 798 797	Molecular physiology of preconditioning-induced brain tolerance to ischemia. 2008, 88, 211-47 Matrix Metalloproteinases in Tissue Remodelling and Inflammation. 2008, Extension of the thrombolytic time window with minocycline in experimental stroke. 2008, 39, 3372-7 Reperfusion-associated hemorrhagic transformation in SHR rats: evidence of symptomatic parenchymal hematoma. 2008, 39, 3405-10 Cyclooxygenase inhibition in ischemic brain injury. 2008, 14, 1401-18 Endothelial cell barrier impairment induced by glioblastomas and transforming growth factor beta2	194 5 180 25 81

(2009-2009)

793	Agrin, aquaporin-4, and astrocyte polarity as an important feature of the blood-brain barrier. 2009 , 15, 180-93		95
79²	Plasma and brain matrix metalloproteinase-9 after acute focal cerebral ischemia in rats. 2009 , 40, 2836-42		103
791	Role of interleukin-1beta in early brain injury after subarachnoid hemorrhage in mice. 2009 , 40, 2519-25		156
790	TNF alpha-mediated disruption of spermatogenesis in response to Sertoli cell injury in rodents is partially regulated by MMP2. 2009 , 80, 581-9		73
789	Penetrating and Branch Artery Disease. 2009 , 291-315		2
788	A differential release of matrix metalloproteinases 9 and 2 during coronary artery bypass grafting and off-pump coronary artery bypass surgery. 2009 , 137, 1218-24		11
787	Enhanced cerebrovascular expression of matrix metalloproteinase-9 and tissue inhibitor of metalloproteinase-1 via the MEK/ERK pathway during cerebral ischemia in the rat. 2009 , 10, 56		51
786	Endothelial endothelin-1 over-expression using receptor tyrosine kinase tie-1 promoter leads to more severe vascular permeability and blood brain barrier breakdown after transient middle cerebral artery occlusion. 2009 , 1266, 121-9		54
7 ⁸ 5	Disruptions of occludin and claudin-5 in brain endothelial cells in vitro and in brains of mice with acute liver failure. 2009 , 50, 1914-23		110
7 ⁸ 4	Hypoxia-induced matrix metalloproteinase-13 expression in astrocytes enhances permeability of brain endothelial cells. 2009 , 220, 163-73		56
783	Neurovascular mechanisms and blood-brain barrier disorder in Alzheimer's disease. 2009 , 118, 103-13		660
782	Pharmacologic management of brain edema. 2009 , 11, 64-73		7
781	Functions of lipid raft membrane microdomains at the blood-brain barrier. 2009, 87, 765-74		46
78o	Increased apparent diffusion coefficients on MRI linked with matrix metalloproteinases and edema in white matter after bilateral carotid artery occlusion in rats. <i>Journal of Cerebral Blood Flow and 7.3 Metabolism</i> , 2009 , 29, 308-16	;	51
779	Dissociation and protection of the neurovascular unit after thrombolysis and reperfusion in ischemic rat brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 715-25	,	143
778	Cerebral ischemia-reperfusion injury in ratsa 3 T MRI study on biphasic blood-brain barrier opening and the dynamics of edema formation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 1846-5 5^{-3}	,	108
777	Microglial low-density lipoprotein receptor-related protein 1 mediates the effect of tissue-type plasminogen activator on matrix metalloproteinase-9 activity in the ischemic brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 1946-54	,	47
776	When hypothermia meets hypotension and hyperglycemia: the diverse effects of adenosine 5'-monophosphate on cerebral ischemia in rats. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 7.3 2009 , 29, 1022-34	,	39

775	In vivo near-infrared fluorescence imaging of matrix metalloproteinase activity after cerebral ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 1284-92	7.3	59
774	Post-ischemic brain damage: pathophysiology and role of inflammatory mediators. 2009 , 276, 13-26		316
773	Oxidative stress and its role in the pathogenesis of ischaemic stroke. 2009 , 4, 461-70		577
772	Normobaric hyperoxia attenuates early blood-brain barrier disruption by inhibiting MMP-9-mediated occludin degradation in focal cerebral ischemia. 2009 , 108, 811-20		150
771	Occludin oligomeric assemblies at tight junctions of the blood-brain barrier are altered by hypoxia and reoxygenation stress. 2009 , 110, 58-71		66
770	Matrix metalloproteinases inhibition provides neuroprotection against hypoxia-ischemia in the developing brain. 2009 , 111, 726-36		88
769	Vascular MMP-9/TIMP-2 and neuronal MMP-10 up-regulation in human brain after stroke: a combined laser microdissection and protein array study. 2009 , 8, 3191-7		83
768	An emerging role of mast cells in cerebral ischemia and hemorrhage. 2009 , 41, 438-50		61
767	Therapeutic application of gene silencing MMP-9 in a middle cerebral artery occlusion-induced focal ischemia rat model. 2009 , 216, 35-46		75
766	CD47 gene knockout protects against transient focal cerebral ischemia in mice. 2009 , 217, 165-70		45
765	Different circulating metalloproteinases profiles in women with migraine with and without aura. 2009 , 408, 60-4		29
764	The development of stroke therapeutics: promising mechanisms and translational challenges. 2009 , 56, 329-41		70
763	Diverse roles of matrix metalloproteinases and tissue inhibitors of metalloproteinases in neuroinflammation and cerebral ischemia. 2009 , 158, 983-94		406
762	Matrix metalloproteinase-9 deficiency leads to prolonged foreign body response in the brain associated with increased IL-1beta levels and leakage of the blood-brain barrier. 2009 , 28, 148-59		35
761	Altered expression of tight junction proteins and matrix metalloproteinases in thiamine-deficient mouse brain. 2009 , 55, 275-81		23
760	Resveratrol inhibits MMP-9 expression by up-regulating PPAR alpha expression in an oxygen glucose deprivation-exposed neuron model. 2009 , 451, 105-8		52
759	Blood-brain barrier disruption in the striatum of rats treated with 3-nitropropionic acid. 2009, 30, 136-	43	19
758	Effect of electromagnetic pulse exposure on brain micro vascular permeability in rats. 2009 , 22, 265-8		26

(2010-2010)

757	Reduction of endothelial tight junction proteins is related to cerebral aneurysm formation in rats. 2010 , 28, 1883-91	55
756	In situ complex adenocarcinoma on the femoral part of the hindlimb in an Asian Leaf Turtle (Cyclemys dentata). 2010 , 58, 431-40	6
755	A New Hypothesis for Insulin Resistance in Hypertension Due to Receptor Cleavage. 2010 , 5, 149-158	20
754	Inhibition of telomerase activity alters tight junction protein expression and induces transendothelial migration of HIV-1-infected cells. 2010 , 298, H1136-45	17
753	Blood-brain barrier breakdown as a therapeutic target in traumatic brain injury. 2010 , 6, 393-403	584
752	Molecular insights and therapeutic targets for blood-brain barrier disruption in ischemic stroke: critical role of matrix metalloproteinases and tissue-type plasminogen activator. 2010 , 38, 376-85	203
751	The effects of Tanshinone IIA on blood-brain barrier and brain edema after transient middle cerebral artery occlusion in rats. 2010 , 17, 1145-9	62
750	Genome response to tissue plasminogen activator in experimental ischemic stroke. 2010 , 11, 254	14
749	Accumulation of macromolecules in brain parenchyma in acute phase of cerebral infarction/reperfusion. 2010 , 1321, 164-8	23
748	Metalloproteinase mediated occludin cleavage in the cerebral microcapillary endothelium under pathological conditions. 2010 , 1326, 114-27	74
747	Regulation of the blood-brain barrier integrity by pericytes via matrix metalloproteinases mediated activation of vascular endothelial growth factor in vitro. 2010 , 1347, 1-10	71
746	A novel quantification of blood-brain barrier damage and histochemical typing after embolic stroke in rats. 2010 , 1359, 186-200	53
745	Suppression of hypoxia-inducible factor-1alpha and its downstream genes reduces acute hyperglycemia-enhanced hemorrhagic transformation in a rat model of cerebral ischemia. 2010 , 88, 2046-55	39
744	Increased intranuclear matrix metalloproteinase activity in neurons interferes with oxidative DNA repair in focal cerebral ischemia. 2010 , 112, 134-49	97
743	Expression of claudin-5 in hepatoid gland biopsies. 2010 , 21, 276-81	3
742	Spontaneous intracerebral hemorrhage during acute and chronic hypertension in mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 56-69	78
741	Matrix metalloproteinase-9 mediates hypoxia-induced vascular leakage in the brain via tight junction rearrangement. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 837-48	242
740	Mast cells as early responders in the regulation of acute blood-brain barrier changes after cerebral ischemia and hemorrhage. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 689-702	145

739	Embolus extravasation is an alternative mechanism for cerebral microvascular recanalization. 2010 , 465, 478-82	129
738	Amphetamine toxicities: classical and emerging mechanisms. 2010 , 1187, 101-21	213
737	Leukocyte transmigration across the blood-brain barrier: perspectives on neuroAIDS. 2010, 15, 478-536	41
736	Dissociation and protection of the neurovascular unit after thrombolysis and reperfusion in ischemic rat brain. 2010 , 122, 195-197	
735	Metzincin proteases and their inhibitors: foes or friends in nervous system physiology?. 2010 , 30, 15337-57	172
734	Enhanced matrix metalloproteinase activity in the spontaneously hypertensive rat: VEGFR-2 cleavage, endothelial apoptosis, and capillary rarefaction. 2010 , 47, 423-31	60
733	New strategies in the management of leptomeningeal metastases. 2010 , 67, 305-12	64
732	Claudin-5 as a novel estrogen target in vascular endothelium. 2010 , 30, 298-304	81
731	Matrix metalloproteinase 2 (MMP-2) degrades soluble vasculotropic amyloid-beta E22Q and L34V mutants, delaying their toxicity for human brain microvascular endothelial cells. 2010 , 285, 27144-27158	39
730	Adaptive cerebral neovascularization in a model of type 2 diabetes: relevance to focal cerebral ischemia. 2010 , 59, 228-35	98
729	Mono-(2-ethylhexyl) phthalate-induced disruption of junctional complexes in the seminiferous epithelium of the rodent testis is mediated by MMP2. 2010 , 82, 516-27	74
728	Intracellular substrate cleavage: a novel dimension in the biochemistry, biology and pathology of matrix metalloproteinases. 2010 , 45, 351-423	212
727	Metalloproteinase and stroke infarct size: role for anti-inflammatory treatment?. 2010 , 1207, 123-33	117
726	Abeta accumulation in choroid plexus is associated with mitochondrial-induced apoptosis. 2010 , 31, 1569-81	51
725	Hydrogen gas reduced acute hyperglycemia-enhanced hemorrhagic transformation in a focal ischemia rat model. 2010 , 169, 402-14	67
724	Progesterone and allopregnanolone attenuate blood-brain barrier dysfunction following permanent focal ischemia by regulating the expression of matrix metalloproteinases. 2010 , 226, 183-90	123
723	Immune Aspects of the Blood B rain Barrier. 2010 , 183-195	
722	THE AUTODIGESTION HYPOTHESIS AND RECEPTOR CLEAVAGE IN DIABETES AND HYPERTENSION. 2011 , 8, 37-46	4

721	Matrix metalloproteinases and small artery remodeling. 2011 , 8, 21-28	15
720	Oxidative stress and blood-brain barrier dysfunction under particular consideration of matrix metalloproteinases. 2011 , 15, 1305-23	106
719	MMP-mediated disruption of claudin-5 in the blood-brain barrier of rat brain after cerebral ischemia. 2011 , 762, 333-45	92
718	Morphology and properties of brain endothelial cells. 2011 , 686, 3-47	25
717	Astrocyte-derived thrombospondin-2 is critical for the repair of the blood-brain barrier. 2011 , 179, 860-8	25
716	Disruption of central nervous system barriers in multiple sclerosis. 2011 , 1812, 252-64	212
715	Cerebral mast cells mediate blood-brain barrier disruption in acute experimental ischemic stroke through perivascular gelatinase activation. 2011 , 42, 3600-5	78
714	Matrix metalloproteinases 2 and 9 in the cochlea: expression and activity after aminoglycoside exposition. 2011 , 181, 28-39	16
713	Modeling of cerebellar hemorrhage. 2011 , 228, 157-9	4
712	Interaction of free radicals, matrix metalloproteinases and caveolin-1 impacts blood-brain barrier permeability. 2011 , 3, 1216-31	105
711	Matrix Metalloproteinase-9 and Haemozoin: Wedding Rings for Human Host and Plasmodium falciparum Parasite in Complicated Malaria. 2011 , 2011, 628435	29
710	Caspase-3 contributes to ZO-1 and Cl-5 tight-junction disruption in rapid anoxic neurovascular unit damage. 2011 , 6, e16760	61
709	HIV gp120 binds to mannose receptor on vaginal epithelial cells and induces production of matrix metalloproteinases. 2011 , 6, e28014	31
708	Matrix metalloproteinase 2 induces epithelial-mesenchymal transition in proximal tubules from the luminal side and progresses fibrosis in mineralocorticoid/salt-induced hypertensive rats. 2011 , 29, 2440-53	12
707	Matrix metalloproteinase inhibition counteracts impairment of cortical experience-dependent plasticity after photothrombotic stroke. 2011 , 33, 2238-46	11
706	Advances in stroke care and research in 2010. 2011 , 38, 562-9	6
705	Review: molecular pathogenesis of blood-brain barrier breakdown in acute brain injury. 2011, 37, 3-23	115
704	Role of matrix metalloproteinase-9 (MMP-9) in striatal blood-brain barrier disruption in a 3-nitropropionic acid model of Huntington's disease. 2011 , 37, 525-37	34

703	Late cerebral ischaemia after subarachnoid haemorrhage: is cerebrovascular receptor upregulation the mechanism behind?. 2011 , 203, 209-24		19
702	Astrocytes and pericytes differentially modulate blood-brain barrier characteristics during development and hypoxic insult. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011 , 31, 693-705	7.3	133
701	Valproic acid attenuates blood-brain barrier disruption in a rat model of transient focal cerebral ischemia: the roles of HDAC and MMP-9 inhibition. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011 , 31, 52-7	7.3	171
700	Blockade of the MEK/ERK pathway with a raf inhibitor prevents activation of pro-inflammatory mediators in cerebral arteries and reduction in cerebral blood flow after subarachnoid hemorrhage in a rat model. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011 , 31, 144-54	7-3	47
699	The effects of fasudil on the permeability of the rat blood-brain barrier and blood-spinal cord barrier following experimental autoimmune encephalomyelitis. 2011 , 239, 61-7		24
698	Matrix metalloproteinases as drug targets in ischemia/reperfusion injury. 2011, 16, 762-78		77
697	Astrocytes and pericytes cooperatively maintain a capillary-like structure composed of endothelial cells on gel matrix. 2011 , 1406, 74-83		29
696	Methamphetamine transiently increases the blood-brain barrier permeability in the hippocampus: role of tight junction proteins and matrix metalloproteinase-9. 2011 , 1411, 28-40		86
695	Matrix metalloproteinases at key junctions in the pathomechanism of stroke. 2011 , 6, 471-485		1
694	Activation of sulfonate ester based matrix metalloproteinase proinhibitors by hydrogen peroxide. 2011 , 16, 313-23		16
693	Effects of hyperbaric oxygen on the expression of claudins after cerebral ischemia-reperfusion in rats. 2011 , 212, 109-17		8
692	Specific role of tight junction proteins claudin-5, occludin, and ZO-1 of the blood-brain barrier in a focal cerebral ischemic insult. 2011 , 44, 130-9		260
691	Blood-brain barrier pathophysiology in traumatic brain injury. 2011 , 2, 492-516		400
690	Role of matrix metalloproteinases and therapeutic benefits of their inhibition in spinal cord injury. 2011 , 8, 206-20		97
689	Tissue inhibitor of metalloproteinases-3 mediates the death of immature oligodendrocytes via TNF-∄TACE in focal cerebral ischemia in mice. 2011 , 8, 108		40
688	Activation of matrix metalloproteinases following anti-A∏immunotherapy; implications for microhemorrhage occurrence. 2011 , 8, 115		25
687	Gliovascular and cytokine interactions modulate brain endothelial barrier in vitro. 2011, 8, 162		29
686	Normobaric hyperoxia protects the blood brain barrier through inhibiting Nox2 containing NADPH oxidase in ischemic stroke. 2011 , 1, 22		42

685	Neurological and pathological improvements of cerebral infarction in mice with platinum nanoparticles. 2011 , 89, 1125-33	31
684	Astrocyte TLR4 activation induces a proinflammatory environment through the interplay between MyD88-dependent NF B signaling, MAPK, and Jak1/Stat1 pathways. 2011 , 59, 242-55	314
683	Occludin is regulated by epidermal growth factor receptor activation in brain endothelial cells and brains of mice with acute liver failure. 2011 , 53, 1294-305	33
682	Synthetic gelatinases inhibitor attenuates electromagnetic pulse-induced blood-brain barrier disruption by inhibiting gelatinases-mediated ZO-1 degradation in rats. 2011 , 285, 31-8	21
681	Anti-high mobility group box-1 monoclonal antibody protects the blood-brain barrier from ischemia-induced disruption in rats. 2011 , 42, 1420-8	236
680	Phosphatidylinositol-3-kinase gamma plays a central role in blood-brain barrier dysfunction in acute experimental stroke. 2011 , 42, 2033-44	52
679	Matrix metalloproteinases are associated with increased blood-brain barrier opening in vascular cognitive impairment. 2011 , 42, 1345-50	105
678	Multiple roles of metalloproteinases in neurological disorders. 2011 , 99, 241-63	36
677	In vitro modeling of the blood-brain barrier: simplicity versus complexity. 2011 , 17, 2755-61	39
676	Beneficial effects of mood stabilizers lithium, valproate and lamotrigine in experimental stroke models. 2011 , 32, 1433-45	37
675	Neuroprotection and sensorimotor functional improvement by curcumin after intracerebral hemorrhage in mice. 2011 , 28, 2513-21	44
674	Claudins. 2011,	1
673	The role of hypoxia-inducible factor-1 paquaporin-4, and matrix metalloproteinase-9 in blood-brain barrier disruption and brain edema after traumatic brain injury. 2011 , 114, 92-101	213
672	Activation of MMP-9 by human lung epithelial cells in response to the cystic fibrosis-associated pathogen Burkholderia cenocepacia reduced wound healing in vitro. 2011 , 301, L575-86	10
671	Serum tight-junction proteins predict hemorrhagic transformation in ischemic stroke patients. 2012 , 79, 1677-85	81
670	Occludin: one protein, many forms. 2012 , 32, 242-50	244
669	Transient opening of the perineurial barrier for analgesic drug delivery. 2012, 109, E2018-27	74
668	Myelin loss associated with neuroinflammation in hypertensive rats. 2012 , 43, 1115-22	96

667	Fluoxetine inhibits matrix metalloprotease activation and prevents disruption of blood-spinal cord barrier after spinal cord injury. 2012 , 135, 2375-89	109
666	Cilostazol reduces the risk of hemorrhagic infarction after administration of tissue-type plasminogen activator in a murine stroke model. 2012 , 43, 499-506	36
665	Matrix metalloproteinase dependent cleavage of cell adhesion molecules in the pathogenesis of CNS dysfunction with HIV and methamphetamine. 2012 , 10, 384-91	14
664	Regulation of proteases after spinal cord injury. 2012 , 29, 2251-62	10
663	ALPERAGE interaction disrupts tight junctions of the blood-brain barrier via Call+-calcineurin signaling. 2012 , 32, 8845-54	166
662	Glutathione in cerebral microvascular endothelial biology and pathobiology: implications for brain homeostasis. 2012 , 2012, 434971	29
661	Magnesium reduces matrix metalloproteinase-9, but not glial fibrillary acidic protein, in cardiac surgery patients. 2012 , 7, 349-359	2
660	Does inhibiting Sur1 complement rt-PA in cerebral ischemia?. 2012 , 1268, 95-107	44
659	Matrix metalloproteinase-9 expression in the nuclear compartment of neurons and glial cells in aging and stroke. 2012 , 32, 492-504	15
658	The blood-brain barrier in health and disease. 2012 , 72, 648-72	448
6 ₅ 8	The blood-brain barrier in health and disease. 2012 , 72, 648-72 Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012 , 48, 309-16	38
	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h	
657	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012 , 48, 309-16 Hyperthermia worsens ischaemic brain injury through destruction of microvessels in an embolic	38
6 ₅₇	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012 , 48, 309-16 Hyperthermia worsens ischaemic brain injury through destruction of microvessels in an embolic model in rats. 2012 , 28, 24-32 Matrix metalloproteinase-2 or -9 deletions protect against hemorrhagic transformation during	38
657 656 655	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012, 48, 309-16 Hyperthermia worsens ischaemic brain injury through destruction of microvessels in an embolic model in rats. 2012, 28, 24-32 Matrix metalloproteinase-2 or -9 deletions protect against hemorrhagic transformation during early stage of cerebral ischemia and reperfusion. 2012, 212, 180-9 Intranuclear matrix metalloproteinases promote DNA damage and apoptosis induced by	38 10 57
657 656 655	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012, 48, 309-16 Hyperthermia worsens ischaemic brain injury through destruction of microvessels in an embolic model in rats. 2012, 28, 24-32 Matrix metalloproteinase-2 or -9 deletions protect against hemorrhagic transformation during early stage of cerebral ischemia and reperfusion. 2012, 212, 180-9 Intranuclear matrix metalloproteinases promote DNA damage and apoptosis induced by oxygen-glucose deprivation in neurons. 2012, 220, 277-90	38 10 57 60
657656655654653	Spatiotemporal evolution of blood brain barrier damage and tissue infarction within the first 3h after ischemia onset. 2012, 48, 309-16 Hyperthermia worsens ischaemic brain injury through destruction of microvessels in an embolic model in rats. 2012, 28, 24-32 Matrix metalloproteinase-2 or -9 deletions protect against hemorrhagic transformation during early stage of cerebral ischemia and reperfusion. 2012, 212, 180-9 Intranuclear matrix metalloproteinases promote DNA damage and apoptosis induced by oxygen-glucose deprivation in neurons. 2012, 220, 277-90 Viral disruption of the blood-brain barrier. 2012, 20, 282-90 Valproic acid attenuates blood-spinal cord barrier disruption by inhibiting matrix metalloprotease-9	38 10 57 60

649	Anti-high mobility group box-1 antibody therapy for traumatic brain injury. 2012 , 72, 373-84	164
648	Matrix metalloproteinase 9 contributes to gut microbe homeostasis in a model of infectious colitis. 2012 , 12, 105	18
647	Infrared optical imaging of matrix metalloproteinases (MMPs) up regulation following ischemia reperfusion is ameliorated by hypothermia. 2012 , 13, 76	29
646	Matrix metalloproteinases 2 and 9 increase permeability of sheep pleura in vitro. 2012 , 12, 2	3
645	Albumin induces upregulation of matrix metalloproteinase-9 in astrocytes via MAPK and reactive oxygen species-dependent pathways. 2012 , 9, 68	56
644	Neurological diseases in relation to the blood-brain barrier. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012 , 32, 1139-51	285
643	Plasma 3-nitrotyrosine estimates the reperfusion-induced cerebrovascular stress, whereas matrix metalloproteinases mainly reflect plasma activity: a study in patients treated with thrombolysis or endovascular recanalization. 2012 , 123 Suppl 2, 138-47	15
642	Ischemia-reperfusion impairs blood-brain barrier function and alters tight junction protein expression in the ovine fetus. 2012 , 226, 89-100	57
641	The disturbed blood-brain barrier in human glioblastoma. 2012 , 33, 579-89	178
640	Can restoring incomplete microcirculatory reperfusion improve stroke outcome after thrombolysis?. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012 , 32, 2091-9	135
639	Role of matrix metalloproteinase-2 and -9 in the development of diabetic retinopathy. 2012 , 5, 1-8	28
638	Perfusion-CT assessment of blood-brain barrier permeability in patients with aneurysmal subarachnoid hemorrhage. 2012 , 39, 317-25	12
637	DIDS prevents ischemic membrane degradation in cultured hippocampal neurons by inhibiting matrix metalloproteinase release. 2012 , 7, e43995	8
636	Volatile anesthetics influence blood-brain barrier integrity by modulation of tight junction protein expression in traumatic brain injury. 2012 , 7, e50752	65
635	Matrix metalloproteinase-2-mediated occludin degradation and caveolin-1-mediated claudin-5 redistribution contribute to blood-brain barrier damage in early ischemic stroke stage. 2012 , 32, 3044-57	286
635	·	286 159
	redistribution contribute to blood-brain barrier damage in early ischemic stroke stage. 2012 , 32, 3044-57 Blood-brain barrier permeability is increased after acute adult stroke but not neonatal stroke in the	

631	Caveolin-1 regulates nitric oxide-mediated matrix metalloproteinases activity and blood-brain barrier permeability in focal cerebral ischemia and reperfusion injury. 2012 , 120, 147-56	159
630	Important role for endothelial calveolin-1 in focal cerebral ischemia-induced blood-brain barrier injury. 2012 , 120, 4-6	2
629	Upregulation of fibronectin and the $\blacksquare \square$ 1 and $\blacksquare \square$ 8 integrins on blood vessels within the cerebral ischemic penumbra. 2012 , 233, 283-91	54
628	Effects of aging on blood brain barrier and matrix metalloproteases following controlled cortical impact in mice. 2012 , 234, 50-61	52
627	Fetal hypoxia and programming of matrix metalloproteinases. 2012 , 17, 124-34	15
626	Modulation of tight junction proteins in the perineurium for regional pain control. 2012 , 1257, 199-206	15
625	Tight junction in blood-brain barrier: an overview of structure, regulation, and regulator substances. 2012 , 18, 609-15	166
624	Tight junction proteins expression and modulation in immune cells and multiple sclerosis. 2012 , 16, 765-75	26
623	Amelioration of cerebral ischemia-reperfusion injury based on liposomal drug delivery system with asialo-erythropoietin. 2012 , 160, 81-7	77
622	Treatment with sodium orthovanadate reduces blood-brain barrier disruption via phosphatase and tensin homolog deleted on chromosome 10 (PTEN) phosphorylation in experimental subarachnoid hemorrhage. 2012 , 90, 691-7	14
621	An emerging role of degrading proteinases in hypertension and the metabolic syndrome: autodigestion and receptor cleavage. 2012 , 14, 88-96	14
620	Molecular pathology of brain edema after severe burns in forensic autopsy cases with special regard to the importance of reference gene selection. 2013 , 127, 881-9	16
619	Blood-brain barrier dysfunction as a cause and consequence of Alzheimer's disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1500-13	339
618	Activation of estrogen receptor 🛘 reduces blood-brain barrier breakdown following ischemic injury. 2013 , 235, 165-73	32
617	Effect of propofol post-treatment on blood-brain barrier integrity and cerebral edema after transient cerebral ischemia in rats. 2013 , 38, 2276-86	32
616	Establishment and evaluation of an experimental animal model of high altitude cerebral edema. 2013 , 547, 82-6	19
615	Acute hyperglycemia worsens ischemic stroke-induced brain damage via high mobility group box-1 in rats. 2013 , 1535, 148-55	43
614	Pathogenesis of acute stroke and the role of inflammasomes. 2013 , 12, 941-66	200

613	Molecular contributions to neurovascular unit dysfunctions after brain injuries: lessons for target-specific drug development. 2013 , 8, 677-689	25
612	Proteases: Structure and Function. 2013,	25
611	Exposure to vehicle emissions results in altered blood brain barrier permeability and expression of matrix metalloproteinases and tight junction proteins in mice. 2013 , 10, 62	85
610	Impact of moderate blast exposures on thrombin biomarkers assessed by calibrated automated thrombography in rats. 2013 , 30, 1881-7	9
609	Therapeutic benefits from nanoparticles: the potential significance of nanoscience in diseases with compromise to the blood brain barrier. 2013 , 113, 1877-903	160
608	Secretion of matrix metalloproteinase-9 from astrocytes by inhibition of tonic P2Y14-receptor-mediated signal(s). 2013 , 33, 47-58	23
607	Matrix metalloproteinase-2 deletions protect against hemorrhagic transformation after 1 h of cerebral ischemia and 23 h of reperfusion. 2013 , 253, 361-7	25
606	Sulforaphane ameliorates the development of experimental autoimmune encephalomyelitis by antagonizing oxidative stress and Th17-related inflammation in mice. 2013 , 250, 239-49	98
605	Intrathecal transplantation of bone marrow stromal cells attenuates blood-spinal cord barrier disruption induced by spinal cord ischemia-reperfusion injury in rabbits. 2013 , 58, 1043-52	32
604	Hyperglycaemia promotes cerebral barrier dysfunction through activation of protein kinase C-I 2013 , 15, 993-9	56
603	Early inhibition of MMP activity in ischemic rat brain promotes expression of tight junction proteins and angiogenesis during recovery. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1104-14	106
602	Normobaric hyperoxia combined with minocycline provides greater neuroprotection than either alone in transient focal cerebral ischemia. 2013 , 240, 9-16	35
601	Matrix metalloproteinase-2 and -9 as promising benefactors in development, plasticity and repair of the nervous system. 2013 , 105, 60-78	115
600	Alteration in P-glycoprotein at the blood-brain barrier in the early period of MCAO in rats. 2013 , 65, 665-72	43
599	Epigenetic mechanisms in cerebral ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1335-46	75
598	Depression after myocardial infarction: TNF-Induced alterations of the blood-brain barrier and its putative therapeutic implications. 2013 , 37, 561-72	49
597	Matrix metalloproteinase (MMP)-2 gene polymorphisms affect circulating MMP-2 levels in patients with migraine with aura. 2013 , 512, 35-40	30
596	Inhibition of NF-kappaB activation by Pyrrolidine dithiocarbamate partially attenuates hippocampal MMP-9 activation and improves cognitive deficits in streptozotocin-induced diabetic rats. 2013 , 238, 44-7	20

595	A study on the effect of JNK inhibitor, SP600125, on the disruption of blood-brain barrier induced by methamphetamine. 2013 , 50, 49-58	45
594	Monocyte chemoattractant protein-1-deficiency results in altered blood-brain barrier breakdown after experimental stroke. 2013 , 44, 2536-44	45
593	Inhibitory effect of matrine on blood-brain barrier disruption for the treatment of experimental autoimmune encephalomyelitis. 2013 , 2013, 736085	27
592	Early exercise protects the blood-brain barrier from ischemic brain injury via the regulation of MMP-9 and occludin in rats. 2013 , 14, 11096-112	39
591	Hemostasis and alterations of the central nervous system. 2013 , 39, 856-75	23
590	Ischemic preconditioning protects against spinal cord ischemia-reperfusion injury in rabbits by attenuating blood spinal cord barrier disruption. 2013 , 14, 10343-54	38
589	Expression of MMP-2 and MMP-9 in benign canine rostrotentorial meningiomas is not correlated to the extent of peritumoral edema. 2013 , 50, 1091-8	7
588	Temporal profile of matrix metalloproteinases and their inhibitors in a human endothelial cell culture model of cerebral ischemia. 2013 , 35, 514-20	22
587	Matrix metalloproteinases and blood-brain barrier disruption in acute ischemic stroke. 2013 , 4, 32	226
586	Chymase-mediated intestinal epithelial permeability is regulated by a protease-activating receptor/matrix metalloproteinase-2-dependent mechanism. 2013 , 304, G479-89	55
585	Involvement of matrix metalloproteinases-2 and -9 in the formation of a lacuna-like cerebral cavity. 2013 , 91, 920-33	7
584	Establishment and characterization of spinal cord microvascular endothelial cell lines. 2013, 4, 326-338	12
583	Progranulin deficiency promotes post-ischemic blood-brain barrier disruption. 2013 , 33, 19579-89	63
582	Blood B rain Barrier and Stroke. 2013 , 91-116	1
581	Beyond cell-cell adhesion: Emerging roles of the tight junction scaffold ZO-2. 2013 , 1, e25039	14
580	Targeting reactive nitrogen species: a promising therapeutic strategy for cerebral ischemia-reperfusion injury. 2013 , 34, 67-77	72
579	Progesterone attenuates cerebral edema in neonatal rats with hypoxic-ischemic brain damage by inhibiting the expression of matrix metalloproteinase-9 and aquaporin-4. 2013 , 6, 263-267	36
578	Endothelial barrier antigen-immunoreactivity is conversely associated with blood-brain barrier dysfunction after embolic stroke in rats. 2013 , 57, e38	15

(2014-2013)

577	Ischemic postconditioning decreases cerebral edema and brain blood barrier disruption caused by relief of carotid stenosis in a rat model of cerebral hypoperfusion. 2013 , 8, e57869		15
576	Myeloperoxidase-derived oxidants induce blood-brain barrier dysfunction in vitro and in vivo. 2013 , 8, e64034		52
575	Status epilepticus induces vasogenic edema via tumor necrosis factor-∄endothelin-1-mediated two different pathways. 2013 , 8, e74458		46
574	Diurnal variation of tight junction integrity associates inversely with matrix metalloproteinase expression in Xenopus laevis corneal epithelium: implications for circadian regulation of homeostatic surface cell desquamation. 2014 , 9, e113810		11
573	Differential spatio-temporal regulation of MMPs in the 5xFAD mouse model of Alzheimer's disease: evidence for a pro-amyloidogenic role of MT1-MMP. 2014 , 6, 247		45
572	Protection after stroke: cellular effectors of neurovascular unit integrity. 2014 , 8, 231		88
571	The role of the blood-brain barrier in the development and treatment of migraine and other pain disorders. 2014 , 8, 302		44
570	Mast cells and neuroinflammation. 2014 , 20, 200-6		80
569	Early reperfusion injury is associated to MMP2 and IL-1 elevation in cortical neurons of rats subjected to middle cerebral artery occlusion. 2014 , 277, 755-63		25
568	The impact of human and mouse differences in NOS2 gene expression on the brain's redox and immune environment. 2014 , 9, 50		19
567	IL17A impairs blood-testis barrier integrity and induces testicular inflammation. 2014 , 358, 885-98		21
566	Protein markers of cerebrovascular disruption of neurovascular unit: immunohistochemical and imaging approaches. 2014 , 25, 481-507		23
565	Progesterone attenuates hemorrhagic transformation after delayed tPA treatment in an experimental model of stroke in rats: involvement of the VEGF-MMP pathway. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 72-80	7.3	75
564	Mechanism of blood-retinal barrier breakdown induced by HIV-1 (Review). 2014 , 7, 768-772		8
563	Neurovascular protection by post-ischemic intravenous injections of the lipoxin A4 receptor agonist, BML-111, in a rat model of ischemic stroke. 2014 , 129, 130-42		39
562	Blood-brain barrier and traumatic brain injury. 2014 , 92, 141-7		92
561	Therapeutic effects of pharmacologically induced hypothermia against traumatic brain injury in mice. 2014 , 31, 1417-30		48
560	Tumor necrosis factor-disruption of brain endothelial cell barrier is mediated through matrix metalloproteinase-9. 2014 , 208, 954-60; discussion 960		41

559	Role of histaminergic system in blood-brain barrier dysfunction associated with neurological disorders. 2014 , 45, 677-86	20
558	Melatonin attenuates inflammatory response-induced brain edema in early brain injury following a subarachnoid hemorrhage: a possible role for the regulation of pro-inflammatory cytokines. 2014 , 57, 340-7	80
557	Involvement of matrix metalloproteinase-9 in amyloid-11-42-induced shedding of the pericyte proteoglycan NG2. 2014 , 73, 684-92	24
556	Effects of the use of assisted reproduction and high-caloric diet consumption on body weight and cardiovascular health of juvenile mouse offspring. 2014 , 147, 111-23	10
555	CNS Barriers in Neurotrauma. 2014 , 3-28	2
554	Adjudin protects against cerebral ischemia reperfusion injury by inhibition of neuroinflammation and blood-brain barrier disruption. 2014 , 11, 107	59
553	Exposure of human astrocytes to leukotriene C4 promotes a CX3CL1/fractalkine-mediated transmigration of HIV-1-infected CD4+ T cells across an in vitro blood-brain barrier model. 2014 , 454-455, 128-38	18
552	Neuroprotective effect of nobiletin on cerebral ischemia-reperfusion injury in transient middle cerebral artery-occluded rats. 2014 , 1559, 46-54	62
551	Cypermethrin induces astrocyte damage: role of aberrant Ca(2+), ROS, JNK, P38, matrix metalloproteinase 2 and migration related reelin protein. 2014 , 111, 51-9	29
550	Glucocorticoids and endothelial cell barrier function. 2014 , 355, 597-605	78
549	Ischemic postconditioning protects the neurovascular unit after focal cerebral ischemia/reperfusion injury. 2014 , 53, 50-8	23
548	Herbal medicines for ischemic stroke: combating inflammation as therapeutic targets. 2014 , 9, 313-39	54
547	Hemorrhagic transformation after ischemic stroke in animals and humans. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 185-99	311
546	Is there new hope for therapeutic matrix metalloproteinase inhibition?. 2014 , 13, 904-27	488
545	Ghrelin inhibits BSCB disruption/hemorrhage by attenuating MMP-9 and SUR1/TrpM4 expression and activation after spinal cord injury. 2014 , 1842, 2403-12	36
544	The significance of matrix metalloproteinase (MMP)-2 and MMP-9 in the ischemic stroke. 2014 , 124, 707-16	71
543	Hypoxia induces FoxO3a-mediated dysfunction of blood-brain barrier. 2014 , 450, 1638-42	13
542	Matrix metalloproteinase-3 promotes early blood-spinal cord barrier disruption and hemorrhage and impairs long-term neurological recovery after spinal cord injury. 2014 , 184, 2985-3000	58

541	A close look at brain dynamics: cells and vessels seen by in vivo two-photon microscopy. 2014 , 121, 36-54	16
540	The good and the bad of neuroinflammation in multiple sclerosis. 2014 , 122, 59-87	39
539	Roles of aquaporins and matrix metalloproteinases in mouse brain edema formation induced by subacute exposure to 1,2-dichloroethane. 2014 , 44, 105-12	21
538	Vascular disruption and blood-brain barrier dysfunction in intracerebral hemorrhage. 2014 , 11, 18	120
537	Inhibition of MMP-2 but not MMP-9 influences inner ear spiral ganglion neurons in vitro. 2014 , 34, 1011-21	4
536	Protective effect of naringenin in experimental ischemic stroke: down-regulated NOD2, RIP2, NF- B , MMP-9 and up-regulated claudin-5 expression. 2014 , 39, 1405-15	47
535	Fluoxetine inhibits transient global ischemia-induced hippocampal neuronal death and memory impairment by preventing blood-brain barrier disruption. 2014 , 79, 161-71	64
534	Tissue oxygen is reduced in white matter of spontaneously hypertensive-stroke prone rats: a longitudinal study with electron paramagnetic resonance. <i>Journal of Cerebral Blood Flow and</i> 7.3 <i>Metabolism</i> , 2014 , 34, 890-6	31
533	The impact of microglial activation on blood-brain barrier in brain diseases. 2014, 8, 362	302
532	Barrier mechanisms in neonatal stroke. 2014 , 8, 359	28
531	Role of P38 MAPK on MMP Activity in Photothrombotic Stroke Mice as Measured using an Ultrafast MMP Activatable Probe. 2015 , 5, 16951	20
530	Detrimental role of the EP1 prostanoid receptor in blood-brain barrier damage following experimental ischemic stroke. 2015 , 5, 17956	46
529	Matrix Metalloproteinase in Blood-Brain Barrier Breakdown in Dementia. 2016 , 49, 893-903	46
528	Creating a "Prosurvival Phenotype" Through Histone Deacetylase Inhibition: Past, Present, and Future. 2015 , 44 Suppl 1, 6-16	29
527	Advanced glycation end products induce glomerular endothelial cell hyperpermeability by upregulating matrix metalloproteinase activity. 2015 , 11, 4447-53	12
526	Peroxynitrite Decomposition Catalyst Reduces Delayed Thrombolysis-induced Hemorrhagic Transformation in Ischemia-reperfused Rat Brains. 2015 , 21, 585-90	25
525	Development of a liposomal drug delivery system for the treatment of ischemic stroke. 2015 , 30, 309-316	1

523	Addition of low-dose valproic acid to saline resuscitation provides neuroprotection and improves long-term outcomes in a large animal model of combined traumatic brain injury and hemorrhagic shock. 2015 , 79, 911-9; discussion 919	48
522	Metalloproteinases and neurodegenerative diseases: pathophysiological and therapeutic perspectives. 2015 , 39	8
521	Blood-brain barrier dysfunction in disorders of the developing brain. 2015 , 9, 40	94
520	New aspects in fenestrated capillary and tissue dynamics in the sensory circumventricular organs of adult brains. 2015 , 9, 390	97
519	Limb Ischemic Perconditioning Attenuates Blood-Brain Barrier Disruption by Inhibiting Activity of MMP-9 and Occludin Degradation after Focal Cerebral Ischemia. 2015 , 6, 406-17	45
518	Lacunar infarction and small vessel disease: pathology and pathophysiology. 2015 , 17, 2-6	114
517	Methylophiopogonanone A Protects against Cerebral Ischemia/Reperfusion Injury and Attenuates Blood-Brain Barrier Disruption In Vitro. 2015 , 10, e0124558	23
516	Neuroinflammation and Alteration of the Blood-Brain Barrier in Alzheimer[s Disease. 2015,	3
515	TGFII exacerbates blood-brain barrier permeability in a mouse model of hepatic encephalopathy via upregulation of MMP9 and downregulation of claudin-5. 2015 , 95, 903-13	53
5 ¹ 4	Nanotherapeutic Approach to Targeting HIV-1 in the CNS. 2015 , 251-268	1
513	Rational modulation of the innate immune system for neuroprotection in ischemic stroke. 2015 , 9, 147	140
512	A Cannabinoid Receptor 2 Agonist Prevents Thrombin-Induced Blood-Brain Barrier Damage via the Inhibition of Microglial Activation and Matrix Metalloproteinase Expression in Rats. 2015 , 6, 467-77	60
511	Inhibition of TNF-protects in vitro brain barrier from ischaemic damage. 2015 , 69, 65-79	25
510	Acute recanalization of carotid stenosis is not proper: an experimental ischaemic stroke study. 2015 , 37, 397-402	2
509	Simvastatin attenuates sepsis-induced blood-brain barrier integrity loss. 2015 , 194, 591-598	24
508	Ang-(1-7) exerts protective role in blood-brain barrier damage by the balance of TIMP-1/MMP-9. 2015 , 748, 30-6	36
507	Estrogen receptor-mediated resveratrol actions on blood-brain barrier of ovariectomized mice. 2015 , 36, 993-1006	23

(2015-2015)

505	Brain tissue responses to neural implants impact signal sensitivity and intervention strategies. 2015 , 6, 48-67	284
504	Revisiting cerebral postischemic reperfusion injury: new insights in understanding reperfusion failure, hemorrhage, and edema. 2015 , 10, 143-52	139
503	Novel evidence of microglial immune response in impairment of Dengue infection of CNS. 2015 , 220, 1170-6	27
502	Upregulation of tissue inhibitor of metalloproteinase-1 contributes to restoration of the extracellular matrix in the rabbit basilar artery during cerebral vasospasm after subarachnoid hemorrhage. 2015 , 1616, 26-36	7
501	ETB receptor-mediated MMP-9 activation induces vasogenic edema via ZO-1 protein degradation following status epilepticus. 2015 , 304, 355-67	44
500	High glucose, glucose fluctuation and carbonyl stress enhance brain microvascular endothelial barrier dysfunction: Implications for diabetic cerebral microvasculature. 2015 , 5, 80-90	29
499	Sequential Amyloid-Degradation by the Matrix Metalloproteases MMP-2 and MMP-9. 2015 , 290, 15078-91	73
498	Methamphetamine effects on blood-brain barrier structure and function. 2015 , 9, 69	72
497	Human severe sepsis cytokine mixture increases I2-integrin-dependent polymorphonuclear leukocyte adhesion to cerebral microvascular endothelial cells in vitro. 2015 , 19, 149	16
496	Platonin preserves blood-brain barrier integrity in septic rats. 2015 , 53, 12-5	10
495	Matrix metalloproteinases as therapeutic targets for stroke. 2015 , 1623, 30-8	143
494	Attenuation of acute stroke injury in rat brain by minocycline promotes blood-brain barrier remodeling and alternative microglia/macrophage activation during recovery. 2015 , 12, 26	152
493	Roundabout 4 regulates blood-tumor barrier permeability through the modulation of ZO-1, Occludin, and Claudin-5 expression. 2015 , 74, 25-37	31
492	Roles of the cyclooxygenase 2 matrix metalloproteinase 1 pathway in brain metastasis of breast cancer. 2015 , 290, 9842-54	75
491	Partially purified components of Uncaria sinensis attenuate blood brain barrier disruption after ischemic brain injury in mice. 2015 , 15, 157	6
490	Matrix Metalloproteinase Expression in Contusional Traumatic Brain Injury: A Paired Microdialysis Study. 2015 , 32, 1553-9	48
489	Dexmedetomidine attenuates blood-spinal cord barrier disruption induced by spinal cord ischemia reperfusion injury in rats. 2015 , 36, 373-83	37
488	Critical role of sphingosine-1-phosphate receptor-2 in the disruption of cerebrovascular integrity in experimental stroke. 2015 , 6, 7893	92

487	Normobaric hyperoxia slows blood-brain barrier damage and expands the therapeutic time window for tissue-type plasminogen activator treatment in cerebral ischemia. 2015 , 46, 1344-1351	57
486	Matrix Metalloproteinase 9 and Vasodilator-Stimulated Phosphoprotein Related to Acute Kidney Injury in Severe Acute Pancreatitis Rats. 2015 , 60, 3647-55	13
485	17 Estradiol Ameliorates Tight Junction Disruption via Repression of MMP Transcription. 2015 , 29, 1347-61	32
484	Matrix Metalloproteinase-12 Induces Blood-Brain Barrier Damage After Focal Cerebral Ischemia. 2015 , 46, 3523-31	43
483	Interactions of oxidative stress and neurovascular inflammation in the pathogenesis of traumatic brain injury. 2015 , 51, 966-79	248
482	Neurovascular regulation in the ischemic brain. 2015 , 22, 149-60	62
481	Extracellular signal-regulated kinase1/2-dependent changes in tight junctions after ischemic preconditioning contributes to tolerance induction after ischemic stroke. 2015 , 220, 13-26	23
480	Methamphetamine and the Blood B rain Barrier. 2016 , 155-168	2
479	MMP-3 Deficiency Alleviates Endotoxin-Induced Acute Inflammation in the Posterior Eye Segment. 2016 , 17,	18
478	Immune Dysregulation in Multiple Sclerosis. 2016 , 15-27	
477	Role of Blood B rain Barrier, Choroid Plexus, and Cerebral Spinal Fluid in Extravasation and Colonization of Brain Metastases. 2016 , 77-102	
476	Oxidative DNA Damage Mediated by Intranuclear MMP Activity Is Associated with Neuronal Apoptosis in Ischemic Stroke. 2016 , 2016, 6927328	29
475	Electroacupuncture Exerts Neuroprotection through Caveolin-1 Mediated Molecular Pathway in Intracerebral Hemorrhage of Rats. 2016 , 2016, 7308261	8
474	The R18 Polyarginine Peptide Is More Effective Than the TAT-NR2B9c (NA-1) Peptide When Administered 60 Minutes after Permanent Middle Cerebral Artery Occlusion in the Rat. 2016 , 2016, 2372710	27
473	Amyloid-□and Astrocytes Interplay in Amyloid-□Related Disorders. 2016 , 17, 338	47
472	A Review of the Mechanisms of Blood-Brain Barrier Permeability by Tissue-Type Plasminogen Activator Treatment for Cerebral Ischemia. 2016 , 10, 2	74
471	Implications of MMP9 for Blood Brain Barrier Disruption and Hemorrhagic Transformation Following Ischemic Stroke. 2016 , 10, 56	226
47°	Cerebral Microvascular Endothelial Cell Apoptosis after Ischemia: Role of Enolase-Phosphatase 1 Activation and Aci-Reductone Dioxygenase 1 Translocation. 2016 , 9, 79	18

469	Effects of electromagnetic pulse exposure on gelatinase of blood-brain barrier in vitro. 2017 , 36, 1-7	2
468	Inhibition of p21-Activated Kinase 1 by IPA-3 Promotes Locomotor Recovery After Spinal Cord Injury in Mice. 2016 , 41, 919-925	1
467	Inhibition of chemokine-like factor 1 improves blood-brain barrier dysfunction in rats following focal cerebral ischemia. 2016 , 627, 192-8	16
466	The Blook-Brain Barrier in Health and Disease. 2016 , 8, i-67	2
465	Blood brain barrier breakdown was found in non-infarcted area after 2-h MCAO. 2016 , 363, 63-8	13
464	Regulation of Caveolin-1 Expression Determines Early Brain Edema After Experimental Focal Cerebral Ischemia. 2016 , 47, 1336-43	40
463	Nanoparticle-mediated brain drug delivery: Overcoming blood-brain barrier to treat neurodegenerative diseases. 2016 , 235, 34-47	766
462	Transient increase of fractional anisotropy in reversible vasogenic edema. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016 , 36, 1731-1743	15
461	Hydrogen sulfide attenuates brain edema in early brain injury after subarachnoid hemorrhage in rats: Possible involvement of MMP-9 induced blood-brain barrier disruption and AQP4 expression. 2016 , 621, 88-97	37
460	Translational Stroke Research on Blood-Brain Barrier Damage: Challenges, Perspectives, and Goals. 2016 , 7, 89-92	49
459	The blood-brain barrier. 2016 , 133, 39-59	113
458	PARP inhibition attenuates early brain injury through NF- B /MMP-9 pathway in a rat model of subarachnoid hemorrhage. 2016 , 1644, 32-8	20
457	Targeting ONOO-/HMGB1/MMP-9 Signaling Cascades: Potential for Drug Development from Chinese Medicine to Attenuate Ischemic Brain Injury and Hemorrhagic Transformation Induced by Thrombolytic Treatment. 2016 , 3, 32-52	8
456	Rodent Models of Vascular Cognitive Impairment. 2016 , 7, 407-14	55
455	Update on the effects of treatment with recombinant tissue-type plasminogen activator (rt-PA) in acute ischemic stroke. 2016 , 16, 1323-1340	13
454	A potential role for glia-derived extracellular matrix remodeling in postinjury epilepsy. 2016 , 94, 794-803	25
453	Non-Neuronal Mechanisms of Brain Damage and Repair After Stroke. 2016 ,	
452	MT1-MMP and its potential role in the vertebrate intestinal morphogenesis. 2016 , 118, 729-735	4

451	Structural Alterations to the Endothelial Tight Junction Complex During Stroke. 2016 , 3-23		1
450	High-Throughput Screening for Identification of Blood-Brain Barrier Integrity Enhancers: A Drug Repurposing Opportunity to Rectify Vascular Amyloid Toxicity. 2016 , 53, 1499-516		31
449	Penetrating and branch artery disease. 287-311		
448	Neuroprotective Effects of Valproic Acid on Blood-Brain Barrier Disruption and Apoptosis-Related Early Brain Injury in Rats Subjected to Subarachnoid Hemorrhage Are Modulated by Heat Shock Protein 70/Matrix Metalloproteinases and Heat Shock Protein 70/AKT Pathways. 2016 , 79, 286-95		31
447	Mouse Adenovirus Type 1 Early Region 1A Effects on the Blood-Brain Barrier. 2016 , 1,		7
446	Protective effects of cilostazol against hemorrhagic stroke: Current and future perspectives. 2016 , 131, 155-61		21
445	Matrix metalloproteinases in the brain and blood-brain barrier: Versatile breakers and makers. Journal of Cerebral Blood Flow and Metabolism, 2016 , 36, 1481-507	7.3	260
444	The role of the low-density lipoprotein receptor-related protein 1 (LRP-1) in regulating blood-brain barrier integrity. 2016 , 27, 623-34		36
443	Roles of NMDARs in maintenance of the mouse cerebrovascular endothelial cell-constructed tight junction barrier. 2016 , 339, 40-50		18
442	Inhibition of MMP-9 attenuates hypertensive cerebrovascular dysfunction in Dahl salt-sensitive rats. 2016 , 413, 25-35		12
441	Genetic manipulation of brain endothelial cells in vivo. 2016 , 1862, 381-94		9
440	Molecular pathophysiology of cerebral edema. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016 , 36, 513-38	7.3	286
	150,5.5.5	, ,	
439	Activation of classical estrogen receptor subtypes reduces tight junction disruption of brain endothelial cells under ischemia/reperfusion injury. 2016 , 92, 78-89		41
439	Activation of classical estrogen receptor subtypes reduces tight junction disruption of brain		41 55
	Activation of classical estrogen receptor subtypes reduces tight junction disruption of brain endothelial cells under ischemia/reperfusion injury. 2016 , 92, 78-89 Cerebral mast cells contribute to postoperative cognitive dysfunction by promoting blood brain		
438	Activation of classical estrogen receptor subtypes reduces tight junction disruption of brain endothelial cells under ischemia/reperfusion injury. 2016 , 92, 78-89 Cerebral mast cells contribute to postoperative cognitive dysfunction by promoting blood brain barrier disruption. 2016 , 298, 158-66 Matrix Metalloproteinase-Mediated Neuroinflammation in Vascular Cognitive Impairment of the		55
438	Activation of classical estrogen receptor subtypes reduces tight junction disruption of brain endothelial cells under ischemia/reperfusion injury. 2016 , 92, 78-89 Cerebral mast cells contribute to postoperative cognitive dysfunction by promoting blood brain barrier disruption. 2016 , 298, 158-66 Matrix Metalloproteinase-Mediated Neuroinflammation in Vascular Cognitive Impairment of the Binswanger Type. 2016 , 36, 195-202 Nobiletin promotes antioxidant and anti-inflammatory responses and elicits protection against		55

(2017-2016)

433	nanoparticles in the postischemic brain. 2016 , 12, 1219-29	31
432	Curcumin by down-regulating NF-kB and elevating Nrf2, reduces brain edema and neurological dysfunction after cerebral I/R. 2016 , 106, 117-27	97
431	Nitric Oxide Interacts with Caveolin-1 to Facilitate Autophagy-Lysosome-Mediated Claudin-5 Degradation in Oxygen-Glucose Deprivation-Treated Endothelial Cells. 2016 , 53, 5935-5947	51
430	Role of Matrix Metalloproteinases in the Pathogenesis of Traumatic Brain Injury. 2016 , 53, 6106-6123	54
429	Heterogeneous vascular permeability and alternative diffusion barrier in sensory circumventricular organs of adult mouse brain. 2016 , 363, 497-511	46
428	Mechanisms of Thrombosis and Thrombolysis. 2016 , 13-27	
427	Factors controlling permeability of the blood-brain barrier. 2016 , 73, 57-77	150
426	Consensus statement for diagnosis of subcortical small vessel disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016 , 36, 6-25	112
425	Matrix Metalloproteinase-8 is a Novel Pathogenetic Factor in Focal Cerebral Ischemia. 2016 , 53, 231-239	22
424	Propitious Therapeutic Modulators to Prevent Blood-Spinal Cord Barrier Disruption in Spinal Cord Injury. 2017 , 54, 3578-3590	44
423	Circulating tight junction proteins mirror blood-brain barrier integrity in leukaemia central nervous system metastasis. 2017 , 35, 365-373	10
422	Sodium Butyrate Ameliorates High-Concentrate Diet-Induced Inflammation in the Rumen Epithelium of Dairy Goats. 2017 , 65, 596-604	30
421	Protein Interactions at Endothelial Junctions and Signaling Mechanisms Regulating Endothelial Permeability. 2017 , 120, 179-206	214
420	Endothelium-targeted overexpression of heat shock protein 27 ameliorates blood-brain barrier disruption after ischemic brain injury. 2017 , 114, E1243-E1252	76
419	3H-1,2-Dithiole-3-thione as a novel therapeutic agent for the treatment of ischemic stroke through Nrf2 defense pathway. 2017 , 62, 180-192	33
418	Bidirectional relationship of mast cells-neurovascular unit communication in neuroinflammation and its involvement in POCD. 2017 , 322, 60-69	25
417	Ghrelin ameliorates blood-brain barrier disruption during systemic hypoxia. 2017 , 102, 376-382	8
416	Blood Occludin Level as a Potential Biomarker for Early Blood Brain Barrier Damage Following Ischemic Stroke. 2017 , 7, 40331	39

415	Protective effects of angiopoietin-like 4 on the blood-brain barrier in acute ischemic stroke treated with thrombolysis in mice. 2017 , 645, 113-120		8
414	Extracellular matrix inflammation in vascular cognitive impairment and dementia. 2017 , 131, 425-437		86
413	Chloride Dysregulation, Seizures, and Cerebral Edema: A Relationship with Therapeutic Potential. 2017 , 40, 276-294		46
412	Astrocytes contribute to All-induced blood-brain barrier damage through activation of endothelial MMP9. 2017 , 142, 464-477		40
411	Blood-Brain Barrier Protection as a Therapeutic Strategy for Acute Ischemic Stroke. 2017 , 19, 957-972		94
410	Mast cells in neuroinflammation and brain disorders. 2017 , 79, 119-133		106
409	Blood-Brain Barrier Permeability Is Exacerbated in Experimental Model of Hepatic Encephalopathy via MMP-9 Activation and Downregulation of Tight Junction Proteins. 2018 , 55, 3642-3659		34
408	Netrin-1 Preserves Blood-Brain Barrier Integrity Through Deleted in Colorectal Cancer/Focal Adhesion Kinase/RhoA Signaling Pathway Following Subarachnoid Hemorrhage in Rats. 2017 , 6,		29
407	Interaction between Ingested-Engineered Nanomaterials and the Gastrointestinal Tract: In Vitro Toxicology Aspects. 2017 , 311-332		5
406	3,4-Methylenedioxymethamphetamine (MDMA, ecstasy) produces edema due to BBB disruption induced by MMP-9 activation in rat hippocampus. 2017 , 118, 157-166		18
405	Dexamethasone suppresses JMJD3 gene activation via a putative negative glucocorticoid response element and maintains integrity of tight junctions in brain microvascular endothelial cells. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017 , 37, 3695-3708	.3	19
404	Effects of Nigella sativa Extract on Markers of Cerebral Angiogenesis after Global Ischemia of Brain in Rats. 2017 , 26, 1514-1520		8
403	Computational Approaches to Matrix Metalloprotease Drug Design. 2017, 1579, 273-285		2
402	Early VEGF inhibition attenuates blood-brain barrier disruption in ischemic rat brains by regulating the expression of MMPs. 2017 , 15, 57-64		59
401	Open-angle glaucoma: therapeutically targeting the extracellular matrix of the conventional outflow pathway. 2017 , 21, 1037-1050		24
400	Pivotal neuroinflammatory and therapeutic role of high mobility group box 1 in ischemic stroke. 2017 , 37,		26
399	Vascular expression of angiopoietin1, 5 11 integrin and tight junction proteins is tightly regulated during vascular remodeling in the post-ischemic brain. 2017 , 362, 248-256		19
398	Discovery of a highly selective chemical inhibitor of matrix metalloproteinase-9 (MMP-9) that allosterically inhibits zymogen activation. 2017 , 292, 17963-17974		61

(2017-2017)

397	Propane-2-sulfonic acid octadec-9-enyl-amide, a novel PPAR妞ual agonist, protects against ischemia-induced brain damage in mice by inhibiting inflammatory responses. 2017 , 66, 289-301	25
396	Increased cerebral expressions of MMPs, CLDN5, OCLN, ZO1 and AQPs are associated with brain edema following fatal heat stroke. 2017 , 7, 1691	8
395	NAD replenishment with nicotinamide mononucleotide protects blood-brain barrier integrity and attenuates delayed tissue plasminogen activator-induced haemorrhagic transformation after cerebral ischaemia. 2017 , 174, 3823-3836	49
394	Matrix metalloproteinase-9 activity and a downregulated Hedgehog pathway impair blood-brain barrier function in an in vitro model of CNS tuberculosis. 2017 , 7, 16031	32
393	Immunoregulatory effect of mast cells influenced by microbes in neurodegenerative diseases. 2017 , 65, 68-89	34
392	Pericytes as Inducers of Rapid, Matrix Metalloproteinase-9-Dependent Capillary Damage during Ischemia. 2017 , 37, 129-140	99
391	A Case of Contrast Leakage Mimicking Intraventricular Hemorrhage in a Patient with Intravenous Thrombolysis. 2017 , 26, e14-e17	1
390	The multifaceted role of metalloproteinases in physiological and pathological conditions in embryonic and adult brains. 2017 , 155, 36-56	26
389	Marine pharmacology: therapeutic targeting of matrix metalloproteinases in neuroinflammation. 2017 , 22, 299-313	12
388	Neuroprotective efficacy of poly-arginine R18 and NA-1 (TAT-NR2B9c) peptides following transient middle cerebral artery occlusion in the rat. 2017 , 114, 9-15	37
387	Therapeutic potential of AAV-mediated MMP-3 secretion from corneal endothelium in treating glaucoma. 2017 , 26, 1230-1246	48
386	Mesenchymal Stem Cell Treatment Prevents Post-Stroke Dysregulation of Matrix Metalloproteinases and Tissue Inhibitors of Metalloproteinases. 2017 , 44, 1360-1369	13
385	Single nucleotide polymorphisms in the angiogenic and lymphangiogenic pathways are associated with lymphedema caused by Wuchereria bancrofti. 2017 , 11, 26	11
384	Protection of the Blood-Brain Barrier as a Therapeutic Strategy for Brain Damage. 2017 , 40, 569-575	22
383	Protection of Tong-Qiao-Huo-Xue Decoction against Cerebral Ischemic Injury through Reduction Blood-Brain Barrier Permeability. 2017 , 65, 1004-1010	14
382	Therapeutic Strategies to Attenuate Hemorrhagic Transformation After Tissue Plasminogen Activator Treatment for Acute Ischemic Stroke. 2017 , 24, 240-253	50
381	Fc-saxatilin suppresses hypoxia-induced vascular leakage by regulating endothelial occludin expression. 2017 , 117, 595-605	1
380	. 2017,	6

379	Role of matrix metalloproteinase-2/9 (MMP2/9) in lead-induced changes in an blood-brain barrier model. 2017 , 13, 1351-1360	22
378	2-Chloroethanol Induced Upregulation of Matrix Metalloproteinase-2 in Primary Cultured Rat Astrocytes Via MAPK Signal Pathways. 2016 , 10, 593	3
377	☑-Adrenergic Receptor-Mediated HIF-1⊞pregulation Mediates Blood Brain Barrier Damage in Acute Cerebral Ischemia. 2017 , 10, 257	30
376	Novel Therapeutic Effects of Leonurine On Ischemic Stroke: New Mechanisms of BBB Integrity. 2017 , 2017, 7150376	34
375	Role of Matrix Metalloproteinases in Brain Edema. 2017 , 199-215	2
374	Picroside II protects the blood-brain barrier by inhibiting the oxidative signaling pathway in cerebral ischemia-reperfusion injury. 2017 , 12, e0174414	16
373	Molecular hydrogen in the treatment of acute and chronic neurological conditions: mechanisms of protection and routes of administration. 2017 , 61, 1-5	11
372	SIRT1 activation by resveratrol reduces brain edema and neuronal apoptosis in an experimental rat subarachnoid hemorrhage model. 2017 , 16, 9627-9635	34
371	The Dynamics of Impaired Blood-Brain Barrier Restoration in a Rat Model of Co-morbid Injury. 2018 , 55, 8071-8083	11
370	Neuronal PirB Upregulated in Cerebral Ischemia Acts as an Attractive Theranostic Target for Ischemic Stroke. 2018 , 7,	13
369	Counteracting the effects of TNF receptor-1 has therapeutic potential in Alzheimer's disease. 2018 , 10,	47
368	Neuroimmune Axes of the Blood-Brain Barriers and Blood-Brain Interfaces: Bases for Physiological Regulation, Disease States, and Pharmacological Interventions. 2018 , 70, 278-314	134
367	Vascular tight junction disruption and angiogenesis in spontaneously hypertensive rat with neuroinflammatory white matter injury. 2018 , 114, 95-110	36
366	Sirtuin 5 as a novel target to blunt blood-brain barrier damage induced by cerebral ischemia/reperfusion injury. 2018 , 260, 148-155	34
365	Neuroprotective effect of Citrus kawachiensis (Kawachi Bankan) peels, a rich source of naringin, against global cerebral ischemia/reperfusion injury in mice. 2018 , 82, 1216-1224	17
364	Non-invasive vagus nerve stimulation reduces blood-brain barrier disruption in a rat model of ischemic stroke. 2018 , 11, 689-698	34
363	Glial scars are permeable to the neurotoxic environment of chronic stroke infarcts. 2018, 112, 63-78	37
362	MMP9 is involved in HO-1-mediated upregulation of apical junctional complex in Caco-2 cells under oxygen-glucose deprivation. 2018 , 498, 125-131	3

361	Quorum-sensing molecule dihydroxy-2,3-pentanedione and its analogs as regulators of epithelial integrity. 2018 , 53, 414-421	4
360	Polymerase delta-interacting protein 2 deficiency protects against blood-brain barrier permeability in the ischemic brain. 2018 , 15, 45	12
359	Role of Autophagy in Endothelial Damage and Blood-Brain Barrier Disruption in Ischemic Stroke. 2018 , 49, 1571-1579	38
358	Targeting RNS/caveolin-1/MMP signaling cascades to protect against cerebral ischemia-reperfusion injuries: potential application for drug discovery. 2018 , 39, 669-682	29
357	Dithiolethione ACDT suppresses neuroinflammation and ameliorates disease severity in experimental autoimmune encephalomyelitis. 2018 , 70, 76-87	7
356	Autophagy- and MMP-2/9-mediated Reduction and Redistribution of ZO-1 Contribute to Hyperglycemia-increased Blood-Brain Barrier Permeability During Early Reperfusion in Stroke. 2018 , 377, 126-137	69
355	Minocycline alters expression of inflammatory markers in autonomic brain areas and ventilatory responses induced by acute hypoxia. 2018 , 103, 884-895	13
354	Matrix Metalloproteinase-8 Inhibition Prevents Disruption of Blood-Spinal Cord Barrier and Attenuates Inflammation in Rat Model of Spinal Cord Injury. 2018 , 55, 2577-2590	36
353	The effects of varying frequency and duration of mechanical stimulation on a tissue-engineered tendon construct. 2018 , 59, 167-177	8
352	Cerebral Ischemic Reperfusion Injury Following Recanalization of Large Vessel Occlusions. 2018 , 82, 781-789	22
351	Different resuscitation strategies and novel pharmacologic treatment with valproic acid in traumatic brain injury. 2018 , 96, 711-719	11
350	Blood-brain barrier dysfunction and recovery after ischemic stroke. 2018 , 163-164, 144-171	328
349	Reperfusion facilitates reversible disruption of the human blood-brain barrier following acute ischaemic stroke. 2018 , 28, 642-649	8
348	Plasma Biomarkers of Inflammation Reflect Seizures and Hemorrhagic Activity of Cerebral Cavernous Malformations. 2018 , 9, 34-43	25
347	Selective knockout of astrocytic Na /H exchanger isoform 1 reduces astrogliosis, BBB damage, infarction, and improves neurological function after ischemic stroke. 2018 , 66, 126-144	51
346	Exposure to traffic-generated air pollutants mediates alterations in brain microvascular integrity in wildtype mice on a high-fat diet. 2018 , 160, 449-461	28
345	M-integrin-matrix interactions modulate cerebral microvessel endothelial cell tight junction expression and permeability. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 641-6587.3	24
344	Seizures Are Associated with Blood-Brain Barrier Disruption in a Piglet Model of Neonatal Hypoxic-Ischaemic Encephalopathy. 2019 , 1-16	5

343	Current progress in searching for clinically useful biomarkers of blood-brain barrier damage following cerebral ischemia. 2018 , 4, 145-152	19
342	Overcoming the Blood-Brain Barrier: The Role of Nanomaterials in Treating Neurological Diseases. 2018 , 30, e1801362	226
341	Potential molecular targets of peroxynitrite in mediating blood-brain barrier damage and haemorrhagic transformation in acute ischaemic stroke with delayed tissue plasminogen activator treatment. 2018 , 52, 1220-1239	17
340	Peripheral Nerve Injury Induces Dynamic Changes of Tight Junction Components. 2018 , 9, 1519	6
339	Dysfunction of Cerebrovascular Endothelial Cells: Prelude to Vascular Dementia. 2018, 10, 376	56
338	Inhibition of HIF-1Reduced Blood Brain Barrier Damage by Regulating MMP-2 and VEGF During Acute Cerebral Ischemia. 2018 , 12, 288	40
337	MiR-539 Targets MMP-9 to Regulate the Permeability of Blood-Brain Barrier in Ischemia/Reperfusion Injury of Brain. 2018 , 43, 2260-2267	22
336	Disrupted Blood-CSF Barrier to Urea and Creatinine in Mild Cognitive Impairment and Alzheimer's Disease. 2018 , 08,	5
335	Inhibition of mTOR protects the blood-brain barrier in models of Alzheimer's disease and vascular cognitive impairment. 2018 , 314, H693-H703	57
334	Potential roles of brain barrier dysfunctions in the early stage of Alzheimer's disease. 2018 , 142, 360-367	5
333	Vascular endothelial growth factor aggravates cerebral ischemia and reperfusion-induced blood-brain-barrier disruption through regulating LOC102640519/HOXC13/ZO-1 signaling. 2018 , 369, 275-283	20
332	Free Radical Damage in Ischemia-Reperfusion Injury: An Obstacle in Acute Ischemic Stroke after Revascularization Therapy. 2018 , 2018, 3804979	185
331	Cerebral Ischemic Reperfusion Injuries (CIRI). 2018,	
330	Impact of pulse pressure on cerebrovascular events leading to age-related cognitive decline. 2018 , 314, H1214-H1224	50
329	Blast exposure elicits blood-brain barrier disruption and repair mediated by tight junction integrity and nitric oxide dependent processes. 2018 , 8, 11344	33
328	Blood-brain barrier dysfunction in ischemic stroke: targeting tight junctions and transporters for vascular protection. 2018 , 315, C343-C356	199
327	Brain endothelial cell junctions after cerebral hemorrhage: Changes, mechanisms and therapeutic targets. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 1255-1275	76
326	Mesenchymal stem cells attenuate blood-brain barrier leakage after cerebral ischemia in mice. 2018 , 15, 135	52

325	Altered Insulin/Insulin-Like Growth Factor Signaling in a Comorbid Rat model of Ischemia and I-Amyloid Toxicity. 2018 , 8, 5136	15
324	Emerging Roles of Sonic Hedgehog in Adult Neurological Diseases: Neurogenesis and Beyond. 2018 , 19,	17
323	Fullerenol Nanoparticles Decrease Blood-Brain Barrier Interruption and Brain Edema during Cerebral Ischemia-Reperfusion Injury Probably by Reduction of Interleukin-6 and Matrix Metalloproteinase-9 Transcription. 2018 , 27, 3053-3065	18
322	Flufenamic acid inhibits secondary hemorrhage and BSCB disruption after spinal cord injury. 2018 , 8, 4181-4198	24
321	Involvement of the p38 MAPK signaling pathway in overexpression of matrix metalloproteinase-9 during the course of brain edema in 1,2-dichloroethane-intoxicated mice. 2018 , 69, 296-306	6
320	Endothelial colony-forming cell-derived exosomes restore blood-brain barrier continuity in mice subjected to traumatic brain injury. 2018 , 307, 99-108	37
319	Lanthanum Chloride Impairs the Blood-Brain Barrier Integrity by Reduction of Junctional Proteins and Upregulation of MMP-9 in Rats. 2019 , 187, 482-491	15
318	Selective Toll-Like Receptor 4 Antagonists Prevent Acute Blood-Brain Barrier Disruption After Subarachnoid Hemorrhage in Mice. 2019 , 56, 976-985	29
317	Prolonged Blood-Brain Barrier Injury Occurs After Experimental Intracerebral Hemorrhage and Is Not Acutely Associated with Additional Bleeding. 2019 , 10, 287-297	27
316	Paracellular Channel as Drug Target. 2019 , 175-199	0
315	Liver X Receptor Alpha Is Important in Maintaining Blood-Brain Barrier Function. 2019, 10, 1811	16
314	The Neuroprotective Effects of Necrostatin-1 on Subarachnoid Hemorrhage in Rats Are Possibly Mediated by Preventing Blood-Brain Barrier Disruption and RIP3-Mediated Necroptosis. 2019 , 28, 1358-1372	21
313	Immunomodulatory Therapeutic Strategies in Stroke. 2019 , 10, 630	29
312	Blood-brain barrier disruption and inflammation reaction in mice after chronic exposure to Microcystin-LR. 2019 , 689, 662-678	23
311	dl-3-n-butylphthalide preserves white matter integrity and alleviates cognitive impairment in mice with chronic cerebral hypoperfusion. 2019 , 25, 1042-1053	14
310	Absence of MCP-induced Protein 1 Enhances Blood-Brain Barrier Breakdown after Experimental Stroke in Mice. 2019 , 20,	6
309	The Blood-Brain Barrier and Its Intercellular Junctions in Age-Related Brain Disorders. 2019 , 20,	35
308	The Precursor to Glutathione (GSH), EGlutamylcysteine (GGC), Can Ameliorate Oxidative Damage and Neuroinflammation Induced by A□Oligomers in Human Astrocytes. 2019 , 11, 177	17

307	Astrocyte-derived fatty acid-binding protein 7 protects blood-brain barrier integrity through a caveolin-1/MMP signaling pathway following traumatic brain injury. 2019 , 322, 113044	23
306	The Neutrophil/Lymphocyte Count Ratio Predicts Mortality in Severe Traumatic Brain Injury Patients. 2019 , 8,	16
305	Neuroinflammation as a target for treatment of stroke using mesenchymal stem cells and extracellular vesicles. 2019 , 16, 178	107
304	Nanomaterial-based blood-brain-barrier (BBB) crossing strategies. 2019 , 224, 119491	132
303	Neutralization of interleukin-9 ameliorates experimental stroke by repairing the blood-brain barrier via down-regulation of astrocyte-derived vascular endothelial growth factor-A. 2019 , 33, 4376-4387	16
302	Claudin-5: gatekeeper of neurological function. 2019 , 16, 3	136
301	Dual Roles of Astrocyte-Derived Factors in Regulation of Blood-Brain Barrier Function after Brain Damage. 2019 , 20,	93
300	Realgar and cinnabar are essential components contributing to neuroprotection of Angong Niuhuang Wan with no hepatorenal toxicity in transient ischemic brain injury. 2019 , 377, 114613	11
299	MMPs and ADAMs in neurological infectious diseases and multiple sclerosis. 2019 , 76, 3097-3116	25
298	Matrix metalloproteinases and ADAMs in stroke. 2019 , 76, 3117-3140	21
297	Role of Neutrophil Extracellular Traps and Vesicles in Regulating Vascular Endothelial Permeability. 2019 , 10, 1037	36
296	Cilostazol ameliorates ischemia/reperfusion-induced tight junction disruption in brain endothelial cells by inhibiting endoplasmic reticulum stress. 2019 , 33, 10152-10164	19
295	Cryptotanshinone Attenuates Oxygen-Glucose Deprivation/ Recovery-Induced Injury in an Model of Neurovascular Unit. 2019 , 10, 381	8
294	Combining Ceftriaxone with Doxycycline and Daptomycin Reduces Mortality, Neuroinflammation, Brain Damage, and Hearing Loss in Infant Rat Pneumococcal Meningitis. 2019 , 63,	11
293	Transcriptional Response and Morphological Features of the Neurovascular Unit and Associated Extracellular Matrix After Experimental Stroke in Mice. 2019 , 56, 7631-7650	2
292	AKR1B10 (Aldo-keto reductase family 1 B10) promotes brain metastasis of lung cancer cells in a multi-organ microfluidic chip model. 2019 , 91, 195-208	48
291	Trauma Biomechanics. 2019 ,	10
290	Applications of Liposomal Drug Delivery Systems to Develop Neuroprotective Agents for the Treatment of Ischemic Stroke. 2019 , 42, 319-326	15

289	Cellular Injury Biomechanics of Central Nervous System Trauma. 2019 , 63-86	1
288	Blood B rain Barrier. 2019 , 325-336	2
287	Angioneurins - Key regulators of blood-brain barrier integrity during hypoxic and ischemic brain injury. 2019 , 178, 101611	17
286	The role of UCH-L1, MMP-9, and GFAP as peripheral markers of different susceptibility to seizure development in a preclinical model of epilepsy. 2019 , 332, 57-63	2
285	Visualizing the Distribution of Matrix Metalloproteinases in Ischemic Brain Using In Vivo F-Magnetic Resonance Spectroscopic Imaging. 2019 , 2019, 8908943	2
284	Tight junction proteins at the blood-brain barrier: far more than claudin-5. 2019 , 76, 1987-2002	74
283	Panax notoginseng Saponins Ameliorate Leukocyte Adherence and Cerebrovascular Endothelial Barrier Breakdown upon Ischemia-Reperfusion in Mice. 2019 , 56, 1-10	8
282	Neuron-glia interactions in the pathophysiology of epilepsy. 2019 , 20, 282-297	126
281	Tumour Necrosis Factor-Anhibition Improves Stroke Outcome in a Mouse Model of Rheumatoid Arthritis. 2019 , 9, 2173	19
280	Human bone marrow mesenchymal stem cell-derived extracellular vesicles attenuate neuroinflammation evoked by focal brain injury in rats. 2019 , 16, 216	55
279	Neuroinflammation in Post-Traumatic Epilepsy: Pathophysiology and Tractable Therapeutic Targets. 2019 , 9,	27
278	Time course of neuropathological events in hyperhomocysteinemic amyloid depositing mice reveals early neuroinflammatory changes that precede amyloid changes and cerebrovascular events. 2019 , 16, 284	14
277	Neuroprotective Effect of SCM-198 through Stabilizing Endothelial Cell Function. 2019 , 2019, 7850154	13
276	Effects of glyphosate and aminomethylphosphonic acid on an isogeneic model of the human blood-brain barrier. 2019 , 304, 39-49	34
275	The neurovascular protective effect of alogliptin in murine MCAO model and brain endothelial cells. 2019 , 109, 181-187	15
274	Mechanisms of Blood-Brain Barrier Disruption in Herpes Simplex Encephalitis. 2019 , 14, 157-172	25
273	Endothelial stromelysin1 regulation by the forkhead box-O transcription factors is crucial in the exudative phase of acute lung injury. 2019 , 141, 249-263	21
272	Neuroinflammatory mechanisms of blood-brain barrier damage in ischemic stroke. 2019 , 316, C135-C153	212

271	Insulin-like Growth Factor (IGF)-1 treatment stabilizes the microvascular cytoskeleton under ischemic conditions. 2019 , 311, 162-172		17
270	Vitamin D deficiency increases blood-brain barrier dysfunction after ischemic stroke in male rats. 2019 , 312, 63-71		19
269	Steroids in Stroke with Special Reference to Progesterone. 2019 , 39, 551-568		21
268	Crotalus atrox disintegrin reduces hemorrhagic transformation by attenuating matrix metalloproteinase-9 activity after middle cerebral artery occlusion in hyperglycemic male rats. 2020 , 98, 191-200		4
267	Neuroinflammation and blood-brain barrier disruption following traumatic brain injury: Pathophysiology and potential therapeutic targets. 2020 , 98, 19-28		55
266	Increased matrix metalloproteinases expression in tuberous sclerosis complex: modulation by microRNA 146a and 147b in vitro. 2020 , 46, 142-159		10
265	TAK-242, Toll-Like Receptor 4 Antagonist, Attenuates Brain Edema in Subarachnoid Hemorrhage Mice. 2020 , 127, 77-81		4
264	Subarachnoid Hemorrhage. 2020 ,		
263	The effect of high mobility group box-1 protein on cerebral edema, blood-brain barrier, oxidative stress and apoptosis in an experimental traumatic brain injury model. 2020 , 154, 68-80		10
262	Shengui Sansheng Pulvis maintains blood-brain barrier integrity by vasoactive intestinal peptide after ischemic stroke. 2020 , 67, 153158		7
261	The neural stem cell secretome and its role in brain repair. 2020 , 1729, 146615		29
260	Protection of blood-brain barrier as a potential mechanism for enriched environments to improve cognitive impairment caused by chronic cerebral hypoperfusion. 2020 , 379, 112385		7
259	Lithium enhances post-stroke blood-brain barrier integrity, activates the MAPK/ERK1/2 pathway and alters immune cell migration in mice. 2020 , 181, 108357		15
258	Longitudinal monitoring of microglial/macrophage activation in ischemic rat brain using Iba-1-specific nanoparticle-enhanced magnetic resonance imaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020 , 40, S117-S133	7.3	4
257	The Role of Transient Receptor Potential Channels in Blood-Brain Barrier Dysfunction after Ischemic Stroke. 2020 , 131, 110647		4
256	The blood brain barrier in cerebral ischemic injury Disruption and repair. 2020 , 1, 34-53		26
255	Omarigliptin Mitigates Lipopolysaccharide-Induced Neuroinflammation and Dysfunction of the Integrity of the Blood-Brain Barrier. 2020 , 11, 4262-4269		10
254	Early Electroacupuncture Extends the rtPA Time Window to 6 h in a Male Rat Model of Embolic Stroke via the ERK1/2-MMP9 Pathway. 2020 , 2020, 1-15		

(2020-2020)

253	Novel MRI Techniques Identifying Vascular Leak and Paravascular Flow Reduction in Early Alzheimer Disease. 2020 , 8,	7
252	Improvement of autophagy dysfunction as a potential mechanism for environmental enrichment to protect blood-brain barrier in rats with vascular cognitive impairment. 2020 , 739, 135437	3
251	Sodium Tanshinone IIA Silate Exerts Microcirculation Protective Effects against Spinal Cord Injury In Vitro and In Vivo. 2020 , 2020, 3949575	7
250	DHA Attenuates Cerebral Edema Following Traumatic Brain Injury via the Reduction in Blood-Brain Barrier Permeability. 2020 , 21,	7
249	Genetic Deletion or Pharmacological Inhibition of Cyclooxygenase-2 Reduces Blood-Brain Barrier Damage in Experimental Ischemic Stroke. 2020 , 11, 887	13
248	Structure, Function, and Regulation of the Blood-Brain Barrier Tight Junction in Central Nervous System Disorders. 2020 , 11, 914	59
247	Chemically defined human vascular laminins for biologically relevant culture of hiPSC-derived brain microvascular endothelial cells. 2020 , 17, 54	6
246	Tau reduction in aged mice does not impact Microangiopathy. 2020 , 8, 137	1
245	Molecular and Cellular Mechanisms Associated with Effects of Molecular Hydrogen in Cardiovascular and Central Nervous Systems. 2020 , 9,	7
244	Water treadmill training attenuates blood-spinal cord barrier disruption in rats by promoting angiogenesis and inhibiting matrix metalloproteinase-2/9 expression following spinal cord injury. 2020 , 17, 70	4
243	Targeting Myeloperoxidase (MPO) Mediated Oxidative Stress and Inflammation for Reducing Brain Ischemia Injury: Potential Application of Natural Compounds. 2020 , 11, 433	43
242	Therapeutic targets of oxidative/nitrosative stress and neuroinflammation in ischemic stroke: Applications for natural product efficacy with omics and systemic biology. 2020 , 158, 104877	28
241	Maternal Exposure to Dibutyl Phthalate Promotes the Formation of Testicular Tight Junctions through Downregulation of NF- B /COX-2/PGE/MMP-2 in Mouse Offspring. 2020 , 54, 8245-8258	8
240	Heavy Metal-Induced Cerebral Small Vessel Disease: Insights into Molecular Mechanisms and Possible Reversal Strategies. 2020 , 21,	16
239	Mechanisms Ensuring Endothelial Junction Integrity Beyond VE-Cadherin. 2020 , 11, 519	25
238	Cadmium-Induced Oxidative Stress: Focus on the Central Nervous System. 2020 , 9,	44
237	3,4-Methylenedioxymethamphetamine causes retinal damage in C57BL/6J mice. 2020 , 39, 1556-1564	O
236	Neonatal excitotoxicity modifies blood-brain barrier properties increasing its susceptibility to hypertonic shock in adulthood. 2020 , 80, 335-346	3

235	Longshengzhi Capsules Improve Ischemic Stroke Outcomes and Reperfusion Injury via the Promotion of Anti-Inflammatory and Neuroprotective Effects in MCAO/R Rats. 2020 , 2020, 9654175	2
234	Tissue Plasminogen Activator Promotes TXNIP-NLRP3 Inflammasome Activation after Hyperglycemic Stroke in Mice. 2020 , 57, 2495-2508	16
233	Autophagy-mediated occludin degradation contributes to blood-brain barrier disruption during ischemia in bEnd.3 brain endothelial cells and rat ischemic stroke models. 2020 , 17, 21	24
232	Cationic Arginine-Rich Peptides (CARPs): A Novel Class of Neuroprotective Agents With a Multimodal Mechanism of Action. 2020 , 11, 108	25
231	Assessment of recombinant tissue plasminogen activator (rtPA) toxicity in cultured neural cells and subsequent treatment with poly-arginine peptide R18D. 2020 , 45, 1215-1229	3
230	Research progress of mechanisms for tight junction damage on blood-brain barrier inflammation. 2020 , 1-12	7
229	The Lyme disease bacterium, Borrelia burgdorferi, stimulates an inflammatory response in human choroid plexus epithelial cells. 2020 , 15, e0234993	7
228	The protective effect of polyethylene glycol-conjugated urokinase nanogels in rat models of ischemic stroke when administrated outside the usual time window. 2020 , 523, 887-893	6
227	Hexahydrocurcumin alleviated blood-brain barrier dysfunction in cerebral ischemia/reperfusion rats. 2020 , 72, 659-671	7
226	Inhibition of the NLRP3 inflammasome reduces brain edema and regulates the distribution of aquaporin-4 after cerebral ischaemia-reperfusion. 2020 , 251, 117638	19
225	Gene Expression Dynamics at the Neurovascular Unit During Early Regeneration After Cerebral Ischemia/Reperfusion Injury in Mice. 2020 , 14, 280	9
224	Mechanisms in blood-brain barrier opening and metabolism-challenged cerebrovascular ischemia with emphasis on ischemic stroke. 2020 , 35, 851-868	19
223	Dual roles of astrocytes in plasticity and reconstruction after traumatic brain injury. 2020 , 18, 62	54
222	Meprin II: A novel regulator of blood-brain barrier integrity. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 41, 31-44	4
221	Hippocampal blood-brain barrier of methamphetamine self-administering HIV-1 transgenic rats. 2021 , 53, 416-429	3
220	Region-selective permeability of the blood-brain barrier to the laminoisobutyric acid during thiamine deficiency and following its reversal. 2021 , 36, 239-246	
219	Supplementation with Eglutamylcysteine (EGC) lessens oxidative stress, brain inflammation and amyloid pathology and improves spatial memory in a murine model of AD. 2021 , 144, 104931	12
218	Blood-Spinal Cord Barrier in Spinal Cord Injury: A Review. 2021 , 38, 1203-1224	16

217 Rebleeding after minimally invasive surgery for intracerebral hemorrhage: A mini-review. **2021**, 2, 24-28

216	The Relationship Between Cerebral Reperfusion And Regional Expression Of Matrix Metalloproteinase-9 In Rat Brain Following Focal Cerebral Ischemia. 2021 , 453, 256-265	1
215	A Vessel for Change: Endothelial Dysfunction in Cerebral Small Vessel Disease. 2021 , 44, 289-305	15
214	Proteoglycan 4 Reduces Neuroinflammation and Protects the Blood-Brain Barrier after Traumatic Brain Injury. 2021 , 38, 385-398	7
213	Astrocytes are necessary for blood-brain barrier maintenance in the adult mouse brain. 2021, 69, 436-472	50
212	Changes in blood-spinal cord barrier permeability and neuroimmune interactions in the underlying mechanisms of chronic pain. 2021 , 6, e879	6
211	Toll-like receptor 4 mediates blood-brain barrier permeability and disease in C3H mice during Venezuelan equine encephalitis virus infection. 2021 , 12, 430-443	5
210	Neurolysin substrates bradykinin, neurotensin and substance P enhance brain microvascular permeability in a human in vitro model. 2021 , 33, e12931	4
209	Inflammatory Mediators Released by Brain Pericytes as Sensors and Effectors in Blood-Brain Barrier Dysfunction. 2021 , 145-164	
208	Sex differences in stroke outcome correspond to rapid and severe changes in gut permeability in adult Sprague-Dawley rats. 2021 , 12, 14	6
207	DL-3n-Butylphthalide Improves Blood-Brain Barrier Integrity in Rat After Middle Cerebral Artery Occlusion. 2020 , 14, 610714	5
206	Intravenous Administration of Human Amniotic Mesenchymal Stem Cells in the Subacute Phase of Cerebral Infarction in a Mouse Model Ameliorates Neurological Disturbance by Suppressing Blood Brain Barrier Disruption and Apoptosis via Immunomodulation. 2021 , 30, 9636897211024183	3
205	Treatment with Atorvastatin During Vascular Remodeling Promotes Pericyte-Mediated Blood-Brain Barrier Maturation Following Ischemic Stroke. 2021 , 12, 905-922	1
204	Functions of ROS in Macrophages and Antimicrobial Immunity. 2021 , 10,	51
203	The role of nuclear factor kappa B (NF-B) in filarial pathology. 2021, 15, 185-193	2
202	Circulating tight-junction proteins are potential biomarkers for blood-brain barrier function in a model of neonatal hypoxic/ischemic brain injury. 2021 , 18, 7	5
201	Potential Therapies for Cerebral Edema After Ischemic Stroke: A Mini Review. 2020 , 12, 618819	12
200	Regulation of post-ischemic inflammatory response: A novel function of the neuronal tyrosine phosphatase STEP. 2021 , 93, 141-155	2

199	Peroxynitrite activates NLRP3 inflammasome and contributes to hemorrhagic transformation and poor outcome in ischemic stroke with hyperglycemia. 2021 , 165, 171-183	5
198	Solitary Fibrous Tumor/Hemangiopericytoma Metastasizes Extracranially, Associated with Altered Expression of WNT5A and MMP9. 2021 , 13,	3
197	Hemorrhagic transformation of ischemic stroke. 2021 , 27, 41-50	1
196	Epigenetics in blood-brain barrier disruption. 2021 , 18, 17	7
195	Long-term dietary supplementation with plant-derived omega-3 fatty acid improves outcome in experimental ischemic stroke. 2021 , 325, 89-98	3
194	Role of albumin on endothelial basement membrane and hemostasis in a rat model of hemorrhagic shock. 2021 , 91, S65-S73	2
193	The taste of neuroinflammation: Molecular mechanisms linking taste sensing to neuroinflammatory responses. 2021 , 167, 105557	1
192	Attachment of Cancer Urothelial Cells to the Bladder Epithelium Occurs on Uroplakin-Negative Cells and Is Mediated by Desmosomal and Not by Classical Cadherins. 2021 , 22,	1
191	Natural Products in the Prevention of Metabolic Diseases: Lessons Learned from the 20th KAST Frontier Scientists Workshop. 2021 , 13,	1
190	Glial Cells as Therapeutic Approaches in Brain Ischemia-Reperfusion Injury. <i>Cells</i> , 2021 , 10, 7.9	4
190 189	Glial Cells as Therapeutic Approaches in Brain Ischemia-Reperfusion Injury. <i>Cells</i> , 2021 , 10, 7.9 TNF-Hantagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021 , 51, e13600	2
	TNF-⊞antagonism rescues the effect of ageing on stroke: Perspectives for targeting	
189	TNF-lantagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021 , 51, e13600	2
189 188	TNF-lantagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021, 51, e13600 Blood-Brain Barrier Dysfunction in the Detrimental Brain Function. Non-invasive vagus nerve stimulation reduced neuron-derived IL-1 and neuroinflammation in	2
189 188 187	TNF-hantagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021, 51, e13600 Blood-Brain Barrier Dysfunction in the Detrimental Brain Function. Non-invasive vagus nerve stimulation reduced neuron-derived IL-1 and neuroinflammation in acute ischemic rat brain. 2021, Celastrol protects against early brain injury after subarachnoid hemorrhage in rats through	2 2 1
189 188 187	TNF-thatagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021, 51, e13600 Blood-Brain Barrier Dysfunction in the Detrimental Brain Function. Non-invasive vagus nerve stimulation reduced neuron-derived IL-10 and neuroinflammation in acute ischemic rat brain. 2021, Celastrol protects against early brain injury after subarachnoid hemorrhage in rats through alleviating blood-brain barrier disruption and blocking necroptosis. 2021, 13, 16816-16833	2 2 1
189 188 187 186	TNF-lantagonism rescues the effect of ageing on stroke: Perspectives for targeting inflamm-ageing. 2021, 51, e13600 Blood-Brain Barrier Dysfunction in the Detrimental Brain Function. Non-invasive vagus nerve stimulation reduced neuron-derived IL-10 and neuroinflammation in acute ischemic rat brain. 2021, Celastrol protects against early brain injury after subarachnoid hemorrhage in rats through alleviating blood-brain barrier disruption and blocking necroptosis. 2021, 13, 16816-16833 Hypertension-induced cognitive impairment: from pathophysiology to public health. 2021, 17, 639-654 Blood-Brain Barrier and Neurodegenerative Diseases-Modeling with iPSC-Derived Brain Cells. 2021,	2 2 1 2 29

181	Non-coding RNAs: the extensive and interactive regulators of the blood-brain barrier permeability. 2021 , 1-9	8
180	New Insight Into Neutrophils: A Potential Therapeutic Target for Cerebral Ischemia. 2021 , 12, 692061	4
179	Relationship between chronic hyperglycemia and contrast extravasation in revascularization of symptomatic intracranial atherosclerotic stenosis: A retrospective single-center study. 2021 , 89, 311-318	
178	Carnosine Protects against Cerebral Ischemic Injury by Inhibiting Matrix-Metalloproteinases. 2021 , 22,	2
177	Breast cancer brain metastasis: insight into molecular mechanisms and therapeutic strategies. 2021 , 125, 1056-1067	4
176	Liver X Receptor as a Possible Drug Target for Blood-Brain Barrier Integrity. 2021 ,	
175	Gestational Hypoxia and Blood-Brain Barrier Permeability: Early Origins of Cerebrovascular Dysfunction Induced by Epigenetic Mechanisms. 2021 , 12, 717550	1
174	Mesenchymal Stem/Stromal Cell Therapy in Blood-Brain Barrier Preservation Following Ischemia: Molecular Mechanisms and Prospects. 2021 , 22,	5
173	The Disruption of the Endothelial Barrier Contributes to Acute Lung Injury Induced by A2 Infection in Mice. 2021 , 22,	3
172	Notoginsenoside R1 intervenes degradation and redistribution of tight junctions to ameliorate blood-brain barrier permeability by Caveolin-1/MMP2/9 pathway after acute ischemic stroke. 2021 , 90, 153660	1
171	The Breast Tumor Microenvironment: A Key Player in Metastatic Spread. 2021 , 13,	2
170	Pericytes of Indirect Contact Coculture Decrease Integrity of Inner Blood-Retina Barrier Model by Upgrading MMP-2/9 Activity. 2021 , 2021, 7124835	O
169	Cadmium promotes glycolysis upregulation and glutamine dependency in human neuronal cells. 2021 , 149, 105144	3
168	The emerging roles of absent in melanoma 2 (AIM2) inflammasome in central nervous system disorders. 2021 , 149, 105122	3
167	Mechanisms of Thrombosis and Thrombolysis. 2022 , 11-23.e4	
166	Perivascular Inflammation and Extracellular Matrix Alterations in Blood-Brain Barrier Dysfunction and Epilepsy. 2021 , 71-106	1
165	Hemorrhagic and ischemic stroke in patients with coronavirus disease 2019: incidence, risk factors, and pathogenesis - a systematic review and meta-analysis. 2021 , 10, 34	15
164	The matrix metalloproteinase inhibitor IPR-179 has antiseizure and antiepileptogenic effects. 2021 , 131,	11

163	Brain Edema in Neurological Diseases. 2011 , 125-168	2
162	Matrix metalloproteinase inhibition attenuates brain edema after surgical brain injury. 2008 , 102, 357-61	11
161	Insights into Mechanisms of Blood-Brain Barrier Permeability IRoles of Free Radicals, Matrix Metalloproteinsases, and Caveolin-1. 2014 , 2049-2067	2
160	MMP-Mediated Collagen Remodeling and Vessel Functions. 2013 , 471-489	1
159	Contributions of Drug Transporters to Blood-Brain Barriers. 2019 , 1141, 407-466	6
158	Brain Edema and Disorders of Cerebrospinal Fluid Circulation. 2012 , 1377-1395	2
157	Astrocytes are necessary for blood-brain barrier maintenance in the adult mouse brain.	1
156	Metals and Cell Adhesion Molecules. 2010 , 327-350	2
155	Blood B rain Barrier Pathophysiology following Traumatic Brain Injury. 2015 , 85-96	13
154	Basic Fibroblast Growth Factor (bFGF) Protects the Blood-Brain Barrier by Binding of FGFR1 and Activating the ERK Signaling Pathway After Intra-Abdominal Hypertension and Traumatic Brain Injury. 2020 , 26, e922009	10
153	Preischemic treadmill exercise improves short-term memory by inhibiting hypoperfusion-induced disruption of blood-brain barrier after bilateral common carotid arteries occlusion. 2019 , 15, 370-376	9
152	Spatiotemporal correlations between blood-brain barrier permeability and apparent diffusion coefficient in a rat model of ischemic stroke. 2009 , 4, e6597	32
151	Matrix metalloproteinase-2 and -9 secreted by leukemic cells increase the permeability of blood-brain barrier by disrupting tight junction proteins. 2011 , 6, e20599	146
150	Exposure to lipopolysaccharide and/or unconjugated bilirubin impair the integrity and function of brain microvascular endothelial cells. 2012 , 7, e35919	75
149	Blood-brain barrier breakdown after embolic stroke in rats occurs without ultrastructural evidence for disrupting tight junctions. 2013 , 8, e56419	122
148	Differential regulation of matrix-metalloproteinases and their tissue inhibitors in patients with aneurysmal subarachnoid hemorrhage. 2013 , 8, e59952	21
147	Disruption of the endothelial barrier by proteases from the bacterial pathogen Pseudomonas aeruginosa: implication of matrilysis and receptor cleavage. 2013 , 8, e75708	25
146	Astrocytes directly influence tumor cell invasion and metastasis in vivo. 2013 , 8, e80933	57

145	Morroniside improves microvascular functional integrity of the neurovascular unit after cerebral ischemia. 2014 , 9, e101194	17
144	Early Abrogation of Gelatinase Activity Extends the Time Window for tPA Thrombolysis after Embolic Focal Cerebral Ischemia in Mice. 2018 , 5,	13
143	Polymorphism of vascular endothelial growth factor gene (VEGF) and matrix metalloproteinase (I) genes in primary limb lymphedema. 2020 , 22, 497-506	1
142	Innate inflammatory responses in stroke: mechanisms and potential therapeutic targets. 2014 , 21, 2076-97	164
141	Targeting Water in the Brain: Role of Aquaporin-4 in Ischemic Brain Edema. 2019, 20, 748-755	14
140	One-Compound-Multi-Target: Combination Prospect of Natural Compounds with Thrombolytic Therapy in Acute Ischemic Stroke. 2017 , 15, 134-156	46
139	Implications of Epigenetic Mechanisms and their Targets in Cerebral Ischemia Models. 2017 , 15, 815-830	22
138	The Stroke-Induced Blood-Brain Barrier Disruption: Current Progress of Inspection Technique, Mechanism, and Therapeutic Target. 2020 , 18, 1187-1212	13
137	Angiogenesis and Blood-Brain Barrier Permeability in Vascular Remodeling after Stroke. 2020 , 18, 1250-1265	14
136	Administration of ghrelin associated with decreased expression of matrix metalloproteinase-9 following normobaric systemic hypoxia in the brain. 2018 , 52, 152-158	1
135	Matrix metalloproteinases, new insights into the understanding of neurodegenerative disorders. 2012 , 20, 133-43	64
134	Effect of isoflurane post-treatment on tPA-exaggerated brain injury in a rat ischemic stroke model. 2015 , 68, 281-6	13
133	The effects of claudin 14 during early Wallerian degeneration after sciatic nerve injury. 2014 , 9, 2151-8	11
132	Differential temporal expression of matrix metalloproteinases following sciatic nerve crush. 2016 , 11, 1165-71	18
131	Propofol protects against blood-spinal cord barrier disruption induced by ischemia/reperfusion injury. 2017 , 12, 125-132	8
130	Limb remote ischemic postconditioning protects integrity of the blood-brain barrier after stroke. 2018 , 13, 1585-1593	12
129	Occludin regulation of blood-brain barrier and potential therapeutic target in ischemic stroke. 2020 , 6, 152-162	17
128	Expression of osteopontin, matrix metalloproteinase-2 and -9 proteins in vascular instability in brain arteriovenous malformation. 2019 , 7, e7058	3

127	Brain Edema and Disorders of Cerebrospinal Fluid Circulation. 2008, 1693-1710	
126	The Blood B rain Barrier B iology, Development, and Brain Injury. 2009 , 303-319	
125	Drug Delivery in the Context of Stroke and Brain Trauma. 2014 , 635-656	
124	Mast Cell as an Early Responder in Ischemic Brain Injury. 2016 , 255-272	
123	Matrix metalloproteinases in stroke. 2017 , 110-117	
122	CIRI After Early Recanalization. 2018 , 43-56	
121	Gelatinase-Mediated Impairment of Microvascular Beds in Cerebral Ischemia and Reperfusion Injury. 2018 , 1-14	
120	Vascular-Related Biomarkers of Ischemic Stroke. 2020 , 9-21	
119	TIMP-2 Polymorphisms Define Subtypes of Hypertensive Intracerebral Hemorrhage with Distinct Perihematomal Edema Development Patterns. 2020 , 17, 44-49	2
118	Neuroinflammation and Modulation Role of Natural Products After Spinal Cord Injury. 2021 , 14, 5713-5737	2
117	Zellulle Trauma-Biomechanik: Verletzungen des zentralen Nervensystems. 2020 , 73-99	
116	Blood-Brain Barrier Mechanisms in Stroke and Trauma. 2021 , 1	1
115	Claudin-1-Targeted Nanoparticles for Delivery to Aging-Induced Alterations in the Blood-Brain Barrier. 2021 ,	2
114	Cell Therapy of Stroke: Do the Intra-Arterially Transplanted Mesenchymal Stem Cells Cross the Blood-Brain Barrier?. <i>Cells</i> , 2021 , 10,	2
113	Blood-Brain Barrier Disruption by Lipopolysaccharide and Sepsis-Associated Encephalopathy. 2021 , 11, 768108	9
112	Circulating miRNAs as Potential Biomarkers Distinguishing Relapsing-Remitting from Secondary Progressive Multiple Sclerosis. A Review. 2021 , 22,	1
111	Increased activity of Rho kinase contributes to hemoglobin-induced early disruption of the blood-brain barrier in vivo after the occurrence of intracerebral hemorrhage. 2014 , 7, 7844-53	14
110	Bone marrow mesenchymal stem cells ameliorate neurological deficits and blood-brain barrier dysfunction after intracerebral hemorrhage in spontaneously hypertensive rats. 2015 , 8, 4715-24	31

109	Heat shock protein 90 inhibition by 17-Dimethylaminoethylamino-17-demethoxygeldanamycin protects blood-brain barrier integrity in cerebral ischemic stroke. 2015 , 7, 1826-37	19
108	[Critical roles of matrix metalloproteinases secreted by leukemic cells in the pathogenesis of central nervous system leukemia]. 2016 , 37, 1070-1076	
107	Activation and Role of Astrocytes in Ischemic Stroke. 2021 , 15, 755955	6
106	Endothelial Dysfunction and Hyperhomocysteinemia-Linked Cerebral Small Vessel Disease: Underlying Mechanisms and Treatment Timing 2021 , 12, 736309	o
105	Epileptische Anf l le bei Schlaganfall. 2021 , 23, 52-61	
104	Emerging therapeutic targets for cerebral edema. 2021,	1
103	SPARC Aggravates Blood-Brain Barrier Disruption via Integrin V3/MAPKs/MMP-9 Signaling Pathway after Subarachnoid Hemorrhage. 2021 , 2021, 9739977	0
102	Effects of Natural Polyphenols on Oxidative Stress-Mediated Blood-Brain Barrier Dysfunction 2022 , 11,	2
101	Breaking barriers: Neurodegenerative repercussions of radiotherapy induced damage on the blood-brain and blood-tumor barrier. 2021 ,	3
100	Pathophysiology of blood brain barrier dysfunction during chronic cerebral hypoperfusion in vascular cognitive impairment 2022 , 12, 1639-1658	7
99	Astrocytic p75 expression provoked by ischemic stroke exacerbates the blood-brain barrier disruption 2022 ,	1
98	Hyperglycemia-induced oxidative stress promotes tumor metastasis by upregulating vWF expression in endothelial cells through the transcription factor GATA1 2022 ,	1
97	The role of inflammasomes in vascular cognitive impairment 2022, 17, 4	3
96	Cross-Talk between Amyloid, Tau Protein and Free Radicals in Post-Ischemic Brain Neurodegeneration in the Form of Alzheimer's Disease Proteinopathy 2022 , 11,	2
95	Pharmacologic treatment with OKN-007 reduces alpha-motor neuron loss in spinal cord of aging mice 2022 , 44, 67	0
94	Neutrophil-Mediated Immunopathology and Matrix Metalloproteinases in Central Nervous System - Tuberculosis 2021 , 12, 788976	o
93	Potential Tear Biomarkers for the Diagnosis of Parkinson's Disease-A Pilot Study 2022 , 10,	0
92	Small Vessel Disease: Ancient Description, Novel Biomarkers 2022 , 23,	2

The protective effects of butorphanol tartrate against homocysteine-induced blood-brain barrier 91 dysfunction.. 2022, 13, 7209-7220 Role of hydrogen sulfide in subarachnoid hemorrhage.. 2022, 90 A New Hypothesis for Alzheimer's Disease: The Lipid Invasion Model.. 2022, 6, 129-161 89 Ο Application of a triple-helical peptide inhibitor of MMP -2/ MMP -9 to examine T-cell activation in 88 experimental autoimmune encephalomyelitis. The ATX-LPA Axis Regulates Vascular Permeability during Cerebral Ischemic-Reperfusion.. 2022, 23, 87 4 The combination of Ling Jiao Gou Teng decoction and ischemic preconditioning protect against 86 cerebral ischemic reperfusion injury in rats by protecting the blood brain barrier. **2022**, 3, 100073 Exploration of the mechanism of luteolin against ischemic stroke based on network pharmacology, 85 2 molecular docking and experimental verification.. 2021, 12, 12274-12293 Glia in Epilepsy: An Overview. 2022, 323-351 84 Image_1.TIF. 2019, 83 82 Image_2.TIF. 2019, Image_3.TIF. 2019, 81 80 Table_1.DOCX. **2019**, Table_2.DOCX. 2019, 79

	4	
_/		/

78

77

76

75

74

Table_3.DOCX. 2019,

Table_1.doc. **2020**,

Data_Sheet_1.docx. 2019,

Data_Sheet_1.docx. 2019,

Data_Sheet_1.pdf. 2020,

73	Table_1.xlsx. 2018 ,	
72	Table_2.xlsx. 2018 ,	
71	Table_3.xlsx. 2018 ,	
70	Data_Sheet_1.DOCX. 2020 ,	
69	Rutin protects hemorrhagic stroke development via supressing oxidative stress and inflammatory events in a zebrafish model 2022 , 174973	О
68	Research on Orientation of Basic Fibroblast Growth Factor with Magnetic Nanoparticles (MNPs) on Regeneration and Recovery of Rats' Dampened Skeletal Muscle and Expressed Level of Matrix Metalloproteinase 2022 , 18, 557-564	O
67	2-Methoxyestradiol Alleviates Neuroinflammation and Brain Edema in Early Brain Injury After Subarachnoid Hemorrhage in Rats 2022 , 16, 869546	О
66	Implications of COVID-19 to stroke medicine: an epidemiological and pathophysiological perspective 2022 , 20,	
65	Angong Niuhuang Wan reduces hemorrhagic transformation and mortality in ischemic stroke rats with delayed thrombolysis: involvement of peroxynitrite-mediated MMP-9 activation 2022 , 17, 51	O
64	Shared Inflammatory Pathology of Stroke and COVID-19 2022 , 23,	O
63	The Blood-Brain Barrier in Stroke and Trauma and How to Enhance Drug Delivery. 2022, 699-722	
62	Role of Cerebral Endothelial Tight Junctions in the Formation of Brain Tumors. 2022 , 271-297	
61	Research Progress on Effects of Chronic Hypoxic Exposure on Cognitive Function. 2022 , 12, 5615-5620	
60	Cells of the Blood B rain Barrier: An Overview of the Neurovascular Unit in Health and Disease. 2022 , 3-24	1
59	Effect of Reconstructive Procedures of the Extracranial Segment of the Carotid Arteries on Damage to the Blood B rain Barrier. 2022 , 19, 6210	
58	Novel Therapeutic Strategies for Ischemic Stroke: Recent Insights into Autophagy. 2022 , 2022, 1-15	O
57	Laminin as a Biomarker of Blood B rain Barrier Disruption under Neuroinflammation: A Systematic Review. 2022 , 23, 6788	3
56	Momordica charantia Exosome-Like Nanoparticles Exert Neuroprotective Effects Against Ischemic Brain Injury via Inhibiting Matrix Metalloproteinase 9 and Activating the AKT/GSK3[Signaling Pathway. 13,	1

55	Niacin mitigates blood B rain barrier tight junctional proteins dysregulation and cerebral inflammation in ketamine rat model of psychosis: Role of GPR109A receptor. 2022 , 119, 110583	1
54	The neurovascular unit and blood@NS barriers in health and disease. 2022 , 111-125	
53	Effect of Hypercapnia and Hypoxia on the Physiology and Metabolism of the Cerebral Endothelium under Ischemic Conditions. 2022 , 58, 769-780	
52	GANAB and N-Glycans Substrates Are Relevant in Human Physiology, Polycystic Pathology and Multiple Sclerosis: A Review. 2022 , 23, 7373	
51	Perfluorooctanoic acid alternatives hexafluoropropylene oxides exert male reproductive toxicity by disrupting blood-testis barrier. 2022 , 157313	O
50	The Role of Pannexin-1 Channels in HIV and NeuroHIV Pathogenesis. <i>Cells</i> , 2022 , 11, 2245 7.9	1
49	Mitigation of perioperative neurocognitive disorders: A holistic approach. 14,	
48	Need for a Paradigm Shift in the Treatment of Ischemic Stroke: The Blood-Brain Barrier. 2022 , 23, 9486	1
47	Cerebral small vessel disease: Pathological mechanisms and potential therapeutic targets. 14,	1
46	The emerging role of furin in neurodegenerative and neuropsychiatric diseases. 2022, 11,	2
45	Contribution of blood-brain barrier-related blood-borne factors for Alzheimer disease vs. vascular dementia diagnosis: A pilot study. 16,	1
44	Delta/Notch signaling in glia maintains motor nerve barrier function and synaptic transmission by controlling matrix metalloproteinase expression. 2022 , 119,	O
43	Regulating microglial miR-155 transcriptional phenotype alleviates Alzheimerß-induced retinal vasculopathy by limiting Clec7a/Galectin-3+ neurodegenerative microglia. 2022 , 10,	О
42	Vascular dementia: A microglia's perspective. 2022 , 81, 101734	O
41	Pharmacological therapy to cerebral ischemia-reperfusion injury: Focus on saponins. 2022 , 155, 113696	О
40	The Gelatinase Inhibitor ACT-03 Reduces Gliosis in the Rapid Kindling Rat Model of Epilepsy, and Attenuates Inflammation and Loss of Barrier Integrity In Vitro. 2022 , 10, 2117	O
39	Indole-3-propionic Acid Attenuates HI-Related Blood B rain Barrier Injury in Neonatal Rats by Modulating the PXR Signaling Pathway. 2022 , 13, 2897-2912	O
38	Antioxidation activity of molecular hydrogen via protoheme catalysis in vivo: an insight from ab initio calculations. 2022 , 28,	O

37	Cerebral Ischemic Reperfusion Injury: Preventative and Therapeutic Strategies. Publish Ahead of Print,	O
36	Markers of blood-brain barrier disruption increase early and persistently in COVID-19 patients with neurological manifestations.	O
35	Glial functions in the blood-brain communication at the circumventricular organs. 16,	O
34	Therapeutic efficacy of matrix metalloproteinase-12 suppression on neurological recovery after ischemic stroke: Optimal treatment timing and duration. 16,	O
33	Regulation of pathological blood-brain barrier for intracranial enhanced drug delivery and anti-glioblastoma therapeutics. 2021 , 29, 351-363	O
32	Chloride Intracellular Channel Proteins (CLICs) and Malignant Tumor Progression: A Focus on the Preventive Role of CLIC2 in Invasion and Metastasis. 2022 , 14, 4890	O
31	Apoptosis-associated speck-like protein containing a CARD-mediated release of matrix metalloproteinase 10 stimulates a change in microglia phenotype. 15,	O
30	Role of microRNAs in the regulation of blood-brain barrier function in ischemic stroke and under hypoxic conditions in vitro. 2,	O
29	MMP-12 knockdown prevents secondary brain damage after ischemic stroke in mice. 2022 , 161, 105432	0
28	Single-cell RNA sequencing of peripheral blood reveals that monocytes with high cathepsin S expression aggravate cerebral ischemia eperfusion injury. 2023 , 107, 330-344	O
27	Marine Natural Products from the Russian Pacific as Sources of Drugs for Neurodegenerative Diseases. 2022 , 20, 708	1
26	The tight junction protein occludin modulates blood-brain barrier integrity and neurological function after ischemic stroke in mice.	O
25	Cerebral microvascular matrix metalloproteinase-3 (MMP3) contributes to vascular injury after stroke in female diabetic rats. 2023 , 162, 105462	O
24	Inflammation and immune cell abnormalities in intracranial aneurysm subarachnoid hemorrhage (SAH): Relevant signaling pathways and therapeutic strategies. 13,	1
23	Serum Proteins Associated with Blood B rain Barrier as Potential Biomarkers for Seizure Prediction. 2022 , 23, 14712	O
22	Markers of blood-brain barrier disruption increase early and persistently in COVID-19 patients with neurological manifestations. 13,	2
21	Embryonic 6:2 FTOH exposure causes reproductive toxicity by disrupting the formation of the blood-testis barrier in offspring mice. 2023 , 250, 114497	O
20	Lutein isolated from Scenedesmus obliquus microalga boosts immunity against cyclophosphamide-induced brain injury in rats. 2022 , 12,	O

19	Is there a role for herpes simplex virus type 1 in multiple sclerosis?. 2022, 105084	0
18	Blood-CNS barrier dysfunction in amyotrophic lateral sclerosis: Proposed mechanisms and clinical implications. 0271678X2311532	O
17	Blood-Brain Barrier-Associated Proteins Are Elevated in Serum of Epilepsy Patients. 2023, 12, 368	0
16	Blood B rain Barrier Integrity Damage in Bacterial Meningitis: The Underlying Link, Mechanisms, and Therapeutic Targets. 2023 , 24, 2852	O
15	Role of microbial dysbiosis in the pathogenesis of Alzheimer's disease. 2023 , 229, 109478	0
14	Serum levels of matrix metalloproteinase 2 and its inhibitor after tonic-clonic seizures. 2023 , 192, 107115	O
13	The meal Maketh the Microglia: Why studying microglial phagocytosis is critical to stroke research. 2023 , 164, 105488	0
12	Ischemic brain edema: Emerging cellular mechanisms and therapeutic approaches. 2023 , 178, 106029	O
11	Emerging Targets for Modulation of Immune Response and Inflammation in Stroke. 2023, 48, 1663-1690	0
10	Role of lipocalin 2 in stroke. 2023 , 179, 106044	1
10	Role of lipocalin 2 in stroke. 2023 , 179, 106044 The tight junction protein occludin modulates blood B rain barrier integrity and neurological function after ischemic stroke in mice. 2023 , 13,	0
	The tight junction protein occludin modulates blood B rain barrier integrity and neurological	
9	The tight junction protein occludin modulates bloodBrain barrier integrity and neurological function after ischemic stroke in mice. 2023 , 13, Mechanisms of BloodBrain Barrier Protection by Microbiota-Derived Short-Chain Fatty Acids. 2023	0
9	The tight junction protein occludin modulates bloodBrain barrier integrity and neurological function after ischemic stroke in mice. 2023, 13, Mechanisms of BloodBrain Barrier Protection by Microbiota-Derived Short-Chain Fatty Acids. 2023, 12, 657 A novel human iPSC model of COL4A1/A2 small vessel disease unveils a key pathogenic role of	0
9 8 7	The tight junction protein occludin modulates bloodBrain barrier integrity and neurological function after ischemic stroke in mice. 2023, 13, Mechanisms of BloodBrain Barrier Protection by Microbiota-Derived Short-Chain Fatty Acids. 2023, 12, 657 A novel human iPSC model of COL4A1/A2 small vessel disease unveils a key pathogenic role of matrix metalloproteinases in extracellular matrix abnormalities. An MMP-9 exclusive neutralizing antibody attenuates blood-brain barrier breakdown in mice with	O O
9 8 7 6	The tight junction protein occludin modulates bloodBrain barrier integrity and neurological function after ischemic stroke in mice. 2023, 13, Mechanisms of BloodBrain Barrier Protection by Microbiota-Derived Short-Chain Fatty Acids. 2023, 12, 657 A novel human iPSC model of COL4A1/A2 small vessel disease unveils a key pathogenic role of matrix metalloproteinases in extracellular matrix abnormalities. An MMP-9 exclusive neutralizing antibody attenuates blood-brain barrier breakdown in mice with stroke and reduces stroke patient-derived MMP-9 activity. 2023, 190, 106720	0 0
9 8 7 6	The tight junction protein occludin modulates bloodBrain barrier integrity and neurological function after ischemic stroke in mice. 2023, 13, Mechanisms of BloodBrain Barrier Protection by Microbiota-Derived Short-Chain Fatty Acids. 2023, 12, 657 A novel human iPSC model of COL4A1/A2 small vessel disease unveils a key pathogenic role of matrix metalloproteinases in extracellular matrix abnormalities. An MMP-9 exclusive neutralizing antibody attenuates blood-brain barrier breakdown in mice with stroke and reduces stroke patient-derived MMP-9 activity. 2023, 190, 106720 The role of the bloodBrain barrier during neurological disease and infection.	O O O

1 HMGB1, angel or devil, in ischemic stroke.

О