Gary A Rosenberg

List of Publications by Year
in descending order

111	15,157	26567	29081
papers	citations	56 h-index	104 g-index

112	112	112	14332
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	National Institute of Neurological Disorders and Strokeâ€“Canadian Stroke Network Vascular Cognitive Impairment Harmonization Standards. Stroke, 2006, 37, 2220-2241.	1.0	1,445
2	Matrix Metalloproteinase-Mediated Disruption of Tight Junction Proteins in Cerebral Vessels is Reversed by Synthetic Matrix Metalloproteinase Inhibitor in Focal Ischemia in Rat. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 697-709.	2.4	913
3	Neuroinflammation: friend and foe for ischemic stroke. Journal of Neuroinflammation, 2019, 16, 142.	3.1	796
4	Matrix metalloproteinases in neuroinflammation. Glia, 2002, 39, 279-291.	2.5	777
5	Bloodâ€“Brain Barrier Breakdown in Acute and Chronic Cerebrovascular Disease. Stroke, 2011, 42, 3323-3328.	1.0	620
6	Matrix metalloproteinases and their multiple roles in neurodegenerative diseases. Lancet Neurology, The, 2009, 8, 205-216.	4.9	515
7	Diverse roles of matrix metalloproteinases and tissue inhibitors of metalloproteinases in neuroinflammation and cerebral ischemia. Neuroscience, 2009, 158, 983-994.	1.1	468
8	Multiple roles for MMPs and TIMPs in cerebral ischemia. Glia, 2005, 50, 329-339.	2.5	401
9	Proteolytic Cascade Enzymes Increase in Focal Cerebral Ischemia in Rat. Journal of Cerebral Blood Flow and Metabolism, 1996, 16, 360-366.	2.4	389
10	Cortical spreading depression activates and upregulates MMP-9. Journal of Clinical Investigation, 2004, 113, 1447-1455.	3.9	389
11	Immunohistochemistry of matrix metalloproteinases in reperfusion injury to rat brain: activation of MMP-9 linked to stromelysin-1 and microglia in cell cultures. Brain Research, 2001, 893, 104-112.	1.1	364
12	Neurological Diseases in Relation to the Bloodâ€“Brain Barrier. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1139-1151.	2.4	347
13	Matrix Metalloproteinases in Cerebrovascular Disease. Journal of Cerebral Blood Flow and Metabolism, 1998, 18, 1163-1172.	2.4	323
14	Vasogenic edema due to tight junction disruption by matrix metalloproteinases in cerebral ischemia. Neurosurgical Focus, 2007, 22, 1-9.	1.0	287
15	TIMP-2 reduces proteolytic opening of blood-brain barrier by type IV collagenase. Brain Research, 1992, 576, 203-207.	1.1	275
16	Closure of the Blood-Brain Barrier by Matrix Metalloproteinase Inhibition Reduces rtPA-Mediated Mortality in Cerebral Ischemia With Delayed Reperfusion. Stroke, 2003, 34, 2025-2030.	1.0	263
17	Cortical spreading depression activates and upregulates MMP-9. Journal of Clinical Investigation, 2004, 113, 1447-1455.	3.9	261
18	Tumor necrosis factor-Î±-induced gelatinase B causes delayed opening of the blood-brain barrier: an expanded therapeutic window. Brain Research, 1995, 703, 151-155.	1.1	250

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19	Matrix metalloproteinases and free radicals in cerebral ischemia. Free Radical Biology and Medicine, 2005, 39, 71-80.	1.3	224
20	Bloodâ€“brain barrier disruption by stromelysin-1 facilitates neutrophil infiltration in neuroinflammation. Neurobiology of Disease, 2006, 23, 87-96.	2.1	210
21	Bloodâ€“Brain Barrier Permeability Abnormalities in Vascular Cognitive Impairment. Stroke, 2011, 42, 2158-2163.	1.0	209
22	Matrix Metalloproteinases in Brain Injury. Journal of Neurotrauma, 1995, 12, 833-842.	1.7	207
23	Extracellular matrix degradation by metalloproteinases and central nervous system diseases. Molecular Neurobiology, 1999, 19, 267-284.	1.9	206
24	Metzincin Proteases and Their Inhibitors: Foes or Friends in Nervous System Physiology?. Journal of Neuroscience, 2010, 30, 15337-15357.	1.7	204
25	White Matter Damage Is Associated With Matrix Metalloproteinases in Vascular Dementia. Stroke, 2001, 32, 1162-1168.	1.0	185
26	Matrix metalloproteinases as therapeutic targets for stroke. Brain Research, 2015, 1623, 30-38.	1.1	185
27	Consensus statement for diagnosis of subcortical small vessel disease. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 6-25.	2.4	173
28	Cyclooxygenase Inhibition Limits Blood-Brain Barrier Disruption following Intracerebral Injection of Tumor Necrosis Factor-Î± in the Rat. Journal of Pharmacology and Experimental Therapeutics, 2007, 323, 488-498.	1.3	159
29	Matrix Metalloproteinases Are Associated With Increased Bloodâ€“Brain Barrier Opening in Vascular Cognitive Impairment. Stroke, 2011, 42, 1345-1350.	1.0	136
30	Extracellular matrix inflammation in vascular cognitive impairment and dementia. Clinical Science, 2017, 131, 425-437.	1.8	134
31	Measurement of Gelatinase B (MMP-9) in the Cerebrospinal Fluid of Patients With Vascular Dementia and Alzheimer Disease. Stroke, 2004, 35, e159-62.	1.0	124
32	ELEVATION OF MATRIX METALLOPROTEINASES 3 AND 9 IN CEREBROSPINAL FLUID AND BLOOD IN PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY. Neurosurgery, 2009, 65, 702-708.	0.6	122
33	Early Inhibition of MMP Activity in Ischemic Rat Brain Promotes Expression of Tight Junction Proteins and Angiogenesis During Recovery. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1104-1114.	2.4	122
34	Inflammation and White Matter Damage in Vascular Cognitive Impairment. Stroke, 2009, 40, S20-3.	1.0	121
35	The Neurovascular Unit in Health and Disease. Stroke, 2009, 40, S2-3.	1.0	118
36	Increased intranuclear matrix metalloproteinase activity in neurons interferes with oxidative DNA repair in focal cerebral ischemia. Journal of Neurochemistry, 2010, 112, 134-149.	2.1	118

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37	Myelin Loss Associated With Neuroinflammation in Hypertensive Rats. Stroke, 2012, 43, 1115-1122.	1.0	117
38	Gelatinase B modulates selective opening of the blood-brain barrier during inflammation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1998, 274, R1203-R1211.	0.9	113
39	MMP-Mediated Disruption of Claudin-5 in the Bloodâ€“Brain Barrier of Rat Brain After Cerebral Ischemia. Methods in Molecular Biology, 2011, 762, 333-345.	0.4	112
40	MRI measurements of Blood-Brain Barrier function in dementia: A review of recent studies. Neuropharmacology, 2018, 134, 259-271.	2.0	108
41	Long-Term Bloodâ€“Brain Barrier Permeability Changes in Binswanger Disease. Stroke, 2015, 46, 2413-2418.	1.0	107
42	Altered static and dynamic functional network connectivity in Alzheimer's disease and subcortical ischemic vascular disease: shared and specific brain connectivity abnormalities. Human Brain Mapping, 2019, 40, 3203-3221.	1.9	107
43	Matrix Metalloproteinases and Neuroinflammation in Multiple Sclerosis. Neuroscientist, 2002, 8, 586-595.	2.6	106
44	Early Beneficial Effect of Matrix Metalloproteinase Inhibition on Bloodâ€”Brain Barrier Permeability as Measured by Magnetic Resonance Imaging Countered by Impaired Long-Term Recovery after Stroke in Rat Brain. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 431-438.	2.4	105
45	Bacterial collagenase disrupts extracellular matrix and opens blood-brain barrier in rat. Neuroscience Letters, 1993, 160, 117-119.	1.0	103
46	Spontaneous Intracerebral Hemorrhage during Acute and Chronic Hypertension in Mice. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 56-69.	2.4	93
47	Hypoxia-Induced Neuroinflammatory White-Matter Injury Reduced by Minocycline in SHR/SP. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 1145-1153.	2.4	87
48	Quantitative measurement of bloodâ€brain barrier permeability in human using dynamic contrastâ€enhanced MRI with fast T₁ mapping. Magnetic Resonance in Medicine, 2011, 65, 1036-1042.	1.9	86
49	Multimodal Markers of Inflammation in the Subcortical Ischemic Vascular Disease Type of Vascular Cognitive Impairment. Stroke, 2014, 45, 1531-1538.	1.0	80
50	Rodent Models of Vascular Cognitive Impairment. Translational Stroke Research, 2016, 7, 407-414.	2.3	76
51	Translational models for vascular cognitive impairment: a review including larger species. BMC Medicine, 2017, 15, 16.	2.3	71
52	Vascular tight junction disruption and angiogenesis in spontaneously hypertensive rat with neuroinflammatory white matter injury. Neurobiology of Disease, 2018, 114, 95-110.	2.1	67
53	Stromelysin-1 and gelatinase A are upregulated before TNF-Î± in LPS-stimulated neuroinflammation. Brain Research, 2002, 933, 42-49.	1.1	62
54	Microglial activation and bloodâ€“brain barrier permeability in cerebral small vessel disease. Brain, 2021, 144, 1361-1371.	3.7	62

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55	Cyclooxygenase-1 and -2 Differentially Modulate Lipopolysaccharide-Induced Bloodâ€“Brain Barrier Disruption through Matrix Metalloproteinase Activity. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 370-380.	2.4	61
56	Matrix Metalloproteinase Inhibition Facilitates Cell Death in Intracerebral Hemorrhage in Mouse. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 752-763.	2.4	60
57	Effect of synthetic matrix metalloproteinase inhibitors on lipopolysaccharide-induced bloodâ€“brain barrier opening in rodents: Differences in response based on strains and solvents. Brain Research, 2007, 1133, 186-192.	1.1	59
58	Neuroimaging in vascular cognitive impairment: a state-of-the-art review. BMC Medicine, 2016, 14, 174.	2.3	59
59	TIMP-3 and MMP-3 contribute to delayed inflammation and hippocampal neuronal death following global ischemia. Experimental Neurology, 2009, 216, 122-131.	2.0	58
60	Increased Apparent Diffusion Coefficients on MRI Linked with Matrix Metalloproteinases and Edema in White Matter after Bilateral Carotid Artery Occlusion in Rats. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 308-316.	2.4	57
61	Tissue inhibitor of metalloproteinases-3 mediates the death of immature oligodendrocytes via TNF-Î±/TACE in focal cerebral ischemia in mice. Journal of Neuroinflammation, 2011, 8, 108.	3.1	56
62	¹H-MRS Differentiates White Matter Hyperintensities in Subcortical Arteriosclerotic Encephalopathy From Those in Normal Elderly. Stroke, 1997, 28, 1940-1943.	1.0	56
63	Hypoxia promotes tau hyperphosphorylation with associated neuropathology in vascular dysfunction. Neurobiology of Disease, 2019, 126, 124-136.	2.1	53
64	Divergent role for MMPâ€2 in myelin breakdown and oligodendrocyte death following transient global ischemia. Journal of Neuroscience Research, 2010, 88, 764-773.	1.3	51
65	13C Nuclear Magnetic Resonance Evidence for ?-Aminobutyric Acid Formation via Pyruvate Carboxylase in Rat Brain: A Metabolic Basis for Compartmentation0. Journal of Neurochemistry, 1989, 53, 1285-1292.	2.1	48
66	Pathophysiology of periventricular tissue changes with raised CSF pressure in cats. Journal of Neurosurgery, 1983, 59, 606-611.	0.9	46
67	Multiple Roles of Metalloproteinases in Neurological Disorders. Progress in Molecular Biology and Translational Science, 2011, 99, 241-263.	0.9	45
68	Tissue Inhibitor of Metalloproteinase-3 is Associated with Neuronal Death in Reperfusion Injury. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 1303-1310.	2.4	44
69	Normobaric hyperoxia combined with minocycline provides greater neuroprotection than either alone in transient focal cerebral ischemia. Experimental Neurology, 2013, 240, 9-16.	2.0	40
70	1H-MR spectroscopy metabolite levels correlate with executive function in vascular cognitive impairment. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, 715-721.	0.9	39
71	Tissue Oxygen is Reduced in White Matter of Spontaneously Hypertensive-Stroke Prone Rats: A Longitudinal Study with Electron Paramagnetic Resonance. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 890-896.	2.4	36
72	Matrix metalloproteinases biomarkers in multiple sclerosis. Lancet, The, 2005, 365, 1291-1293.	6.3	35

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73	Spatiotemporal Correlations between Blood-Brain Barrier Permeability and Apparent Diffusion Coefficient in a Rat Model of Ischemic Stroke. PLoS ONE, 2009, 4, e6597.	1.1	34
74	Comparison of Magnetic Resonance Imaging and Histology in Collagenaseâ€induced Hemorrhage in the Rat. Journal of Neuroimaging, 1995, 5, 23-33.	1.0	33
75	Binswanger's disease: biomarkers in the inflammatory form of vascular cognitive impairment and dementia. Journal of Neurochemistry, 2018, 144, 634-643.	2.1	32
76	Validation of biomarkers in subcortical ischaemic vascular disease of the Binswanger type: approach to targeted treatment trials. Journal of Neurology, Neurosurgery and Psychiatry, 2015, 86, 1324-1330.	0.9	31
77	Atrial Natriuretic Peptide Blocks Hemorrhagic Brain Edema After 4-Hour Delay in Rats. Stroke, 1995, 26, 874-877.	1.0	29
78	Fluorometric immunocapture assay for the specific measurement of matrix metalloproteinase-9 activity in biological samples: application to brain and plasma from rats with ischemic stroke. Molecular Brain, 2013, 6, 14.	1.3	28
79	Dynamic Contrast-Enhanced MRI Evaluation of Cerebral Cavernous Malformations. Translational Stroke Research, 2013, 4, 500-506.	2.3	28
80	Transient increase of fractional anisotropy in reversible vasogenic edema. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1731-1743.	2.4	27
81	Binswangerâ€™s disease: toward a diagnosis agreement and therapeutic approach. Expert Review of Neurotherapeutics, 2014, 14, 1203-1213.	1.4	25
82	Matrix Metalloproteinase-Mediated Neuroinflammation in Vascular Cognitive Impairment of the Binswanger Type. Cellular and Molecular Neurobiology, 2016, 36, 195-202.	1.7	24
83	Spontaneous Posterior Fossa Subdural Hematoma as a Complication of Anticoagulation. Neurosurgery, 1984, 15, 241-242.	0.6	23
84	AUF-1 mediates inhibition by nitric oxide of lipopolysaccharide-induced matrix metalloproteinase-9 expression in cultured astrocytes. Journal of Neuroscience Research, 2006, 84, 360-369.	1.3	20
85	Quantitative evaluation of the effect of propylene glycol on BBB permeability. Journal of Magnetic Resonance Imaging, 2007, 25, 39-47.	1.9	20
86	Differential expression of tissue inhibitor of metalloproteinases-3 in cultured astrocytes and neurons regulates the activation of matrix metalloproteinase-2. Journal of Neuroscience Research, 2007, 85, 829-836.	1.3	20
87	Biomarkers identify the Binswanger type of vascular cognitive impairment. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1602-1612.	2.4	19
88	Tissue Inhibitor of Metalloproteinase-3 Is Associated With Neuronal Death in Reperfusion Injury. Journal of Cerebral Blood Flow and Metabolism, 2002, , 1303-1310.	2.4	19
89	Matrix metalloproteinases in multiple sclerosis: Is it time for a treatment trial?. Annals of Neurology, 2001, 50, 431-433.	2.8	18
90	Inflammatory Biomarkers Aid in Diagnosis of Dementia. Frontiers in Aging Neuroscience, 2021, 13, 717344.	1.7	17

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91	Vascular cognitive impairment: Biomarkers in diagnosis and molecular targets in therapy. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 4-5.	2.4	14
92	In search of multimodal brain alterations in Alzheimer's and Binswanger's disease. NeuroImage: Clinical, 2020, 26, 101937.	1.4	13
93	Quantification of blood-to-brain transfer rate in multiple sclerosis. Multiple Sclerosis and Related Disorders, 2013, 2, 124-132.	0.9	11
94	Metalloproteinases and neurodegenerative diseases: pathophysiological and therapeutic perspectives. Metalloproteinases in Medicine, 0, , 39.	1.0	11
95	MMP-9 inhibitors impair learning in spontaneously hypertensive rats. PLoS ONE, 2018, 13, e0208357.	1.1	10
96	A Multimodal Approach to Stratification of Patients with Dementia: Selection of Mixed Dementia Patients Prior to Autopsy. Brain Sciences, 2019, 9, 187.	1.1	7
97	Discriminating VCID subgroups: A diffusion MRI multi-model fusion approach. Journal of Neuroscience Methods, 2020, 335, 108598.	1.3	6
98	A double-dichotomy clustering of dual pathology dementia patients. Cerebral Circulation - Cognition and Behavior, 2021, 2, 100011.	0.4	6
99	Shared Inflammatory Pathology of Stroke and COVID-19. International Journal of Molecular Sciences, 2022, 23, 5150.	1.8	6
100	Modeling of cerebellar hemorrhage. Experimental Neurology, 2011, 228, 157-159.	2.0	5
101	Chapter 15 Experimental models in intracerebral hemorrhage. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2008, 92, 307-324.	1.0	3
102	Understanding aging effects on brain ischemia. Neurobiology of Disease, 2019, 126, 3-4.	2.1	3
103	Brain Edema and Disorders of Cerebrospinal Fluid Circulation. , 2012, , 1377-1395.		3
104	Brain Edema in Neurological Diseases. Advances in Neurobiology, 2011, , 125-168.	1.3	2
105	Blood-ocular barrier leakage. Neurology, 2018, 90, 491-492.	1.5	1
106	Expanding the horizon of research into theÂpathogenesis of the white matter diseases: Proceedings of the 2021 Annual Workshop of the Albert Research Institute for White Matter and Cognition. GeroScience, 2022, 44, 25-37.	2.1	1
107	Extracellular matrix-degrading metalloproteinases and neuroinflammation in stroke. , 2001, , 287-297.		1
108	The role of matrix metalloproteinases and urokinase in bloodâ€“brain barrier damage with thrombolysis. , 2002, , 161-171.		0

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109	Matrix Metalloproteinases and Neuroinflammation in Multiple Sclerosis. , 2005, , 351-371.		0
110	Gliovascular Mechanisms and White Matter Injury in Vascular Cognitive Impairment and Dementia. , 2022, , 153-160.e4.		0
111	Neuroimaging of White Matter Injury: A Multimodal Approach to Vascular Disease. , 2014, , 67-90.		0