Mark P Mattson

List of Publications by Year in Descending Order

192 papers	27,732 citations	86 h-index	166 g-index
200 ext. papers	31,974 ext. citations	10.5 avg, IF	7.76 L-index

#	Paper	IF	Citations
192	Integrative epigenomic and transcriptomic analyses reveal metabolic switching by intermittent fasting in brain.. *GeroScience*, **2022**, 1	8.9	2
191	NAD supplementation prevents STING-induced senescence in ataxia telangiectasia by improving mitophagy. *Aging Cell*, **2021**, 20, e13329	9.9	18
190	Neuronal and Astrocytic Extracellular Vesicle Biomarkers in Blood Reflect Brain Pathology in Mouse Models of Alzheimer's Disease. *Cells*, **2021**, 10,	7.9	7
189	Neuronal Aquaporin 1 Inhibits Amyloidogenesis by Suppressing the Interaction Between Beta-Secretase and Amyloid Precursor Protein. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2021**, 76, 23-31	6.4	6
188	Mitochondrial DNA in extracellular vesicles declines with age. *Aging Cell*, **2021**, 20, e13283	9.9	18
187	Alzheimer's disease-causing presenilin-1 mutations have deleterious effects on mitochondrial function. *Theranostics*, **2021**, 11, 8855-8873	12.1	4
186	Intermittent and periodic fasting, longevity and disease.. *Nature Aging*, **2021**, 1, 47-59		24
185	Applying available knowledge and resources to alleviate familial and sporadic neurodegenerative disorders. *Progress in Molecular Biology and Translational Science*, **2021**, 177, 91-107	4	0
184	NAD supplementation reduces neuroinflammation and cell senescence in a transgenic mouse model of Alzheimer's disease via cGAS-STING. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	17
183	Glucose metabolic crosstalk and regulation in brain function and diseases. *Progress in Neurobiology*, **2021**, 204, 102089	10.9	5
182	TREM2 interacts with TDP-43 and mediates microglial neuroprotection against TDP-43-related neurodegeneration.. *Nature Neuroscience*, **2021**,	25.5	8
181	Topoisomerase 3β knockout mice show transcriptional and behavioural impairments associated with neurogenesis and synaptic plasticity. *Nature Communications*, **2020**, 11, 3143	17.4	6
180	Astrocyte- and Neuron-Derived Extracellular Vesicles from Alzheimer's Disease Patients Effect Complement-Mediated Neurotoxicity. *Cells*, **2020**, 9,	7.9	20
179	Apolipoprotein E and oxidative stress in brain with relevance to Alzheimer's disease. *Neurobiology of Disease*, **2020**, 138, 104795	7.5	51
178	Biological sex and DNA repair deficiency drive Alzheimer's disease via systemic metabolic remodeling and brain mitochondrial dysfunction. *Acta Neuropathologica*, **2020**, 140, 25-47	14.3	15
177	Lifestyle Medicine Center for Brain Aging and Neurodegenerative Diseases **2020**, 299-308		
176	Steroidal Inhibitors of Na/K-ATPase in a Mouse Model of Alzheimer's Disease. *FASEB Journal*, **2020**, 34, 1-1	0.9	

175	Hormesis: A potential strategic approach to the treatment of neurodegenerative disease. *International Review of Neurobiology*, **2020**, 155, 271-301	4.4	17
174	A mitochondrial uncoupler prodrug protects dopaminergic neurons and improves functional outcome in a mouse model of Parkinson's disease. *Neurobiology of Aging*, **2020**, 85, 123-130	5.6	8
173	Medium Chain Triglycerides induce mild ketosis and may improve cognition in Alzheimer's disease. A systematic review and meta-analysis of human studies. *Ageing Research Reviews*, **2020**, 58, 101001	12	28
172	SIRT3 Haploinsufficiency Aggravates Loss of GABAergic Interneurons and Neuronal Network Hyperexcitability in an Alzheimer's Disease Model. *Journal of Neuroscience*, **2020**, 40, 694-709	6.6	27
171	Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of ageing. *Nature Reviews Drug Discovery*, **2020**, 19, 609-633	64.1	166
170	Involvement of GABAergic interneuron dysfunction and neuronal network hyperexcitability in Alzheimer's disease: Amelioration by metabolic switching. *International Review of Neurobiology*, **2020**, 154, 191-205	4.4	1
169	Intergenerational Metabolic Syndrome and Neuronal Network Hyperexcitability in Autism. *Trends in Neurosciences*, **2019**, 42, 709-726	13.3	12
168	NAD in Brain Aging and Neurodegenerative Disorders. *Cell Metabolism*, **2019**, 30, 630-655	24.6	178
167	An Evolutionary Perspective on Why Food Overconsumption Impairs Cognition. *Trends in Cognitive Sciences*, **2019**, 23, 200-212	14	36
166	A Novel Apolipoprotein E Antagonist Functionally Blocks Apolipoprotein E Interaction With N-terminal Amyloid Precursor Protein, Reduces Amyloid-Associated Pathology, and Improves Cognition. *Biological Psychiatry*, **2019**, 86, 208-220	7.9	19
165	Senolytic therapy alleviates A associated oligodendrocyte progenitor cell senescence and cognitive deficits in an Alzheimer's disease model. *Nature Neuroscience*, **2019**, 22, 719-728	25.5	315
164	Mitophagy inhibits amyloid- and tau pathology and reverses cognitive deficits in models of Alzheimer's disease. *Nature Neuroscience*, **2019**, 22, 401-412	25.5	546
163	NAD augmentation restores mitophagy and limits accelerated aging in Werner syndrome. *Nature Communications*, **2019**, 10, 5284	17.4	89
162	Effects of Intermittent Fasting on Health, Aging, and Disease. *New England Journal of Medicine*, **2019**, 381, 2541-2551	59.2	410
161	Uric acid enhances longevity and endurance and protects the brain against ischemia. *Neurobiology of Aging*, **2019**, 75, 159-168	5.6	17
160	Deuterated polyunsaturated fatty acids reduce brain lipid peroxidation and hippocampal amyloid peptide levels, without discernable behavioral effects in an APP/PS1 mutant transgenic mouse model of Alzheimer's disease. *Neurobiology of Aging*, **2018**, 66, 165-176	5.6	45
159	NAD supplementation normalizes key Alzheimer's features and DNA damage responses in a new AD mouse model with introduced DNA repair deficiency. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E1876-E1885	11.5	195
158	Intermittent metabolic switching, neuroplasticity and brain health. *Nature Reviews Neuroscience*, **2018**, 19, 63-80	13.5	192

157	Altered Extracellular Vesicle Concentration, Cargo, and Function in Diabetes. *Diabetes*, **2018**, 67, 2377-2388	8.9	111
156	Notch signaling and neuronal death in stroke. *Progress in Neurobiology*, **2018**, 165-167, 103-116	10.9	41
155	Intercellular transfer of pathogenic α-synuclein by extracellular vesicles is induced by the lipid peroxidation product 4-hydroxynonenal. *Neurobiology of Aging*, **2018**, 61, 52-65	5.6	42
154	Effect of intermittent vs. daily calorie restriction on changes in weight and patient-reported outcomes in people with multiple sclerosis. *Multiple Sclerosis and Related Disorders*, **2018**, 23, 33-39	4	51
153	Hallmarks of Brain Aging: Adaptive and Pathological Modification by Metabolic States. *Cell Metabolism*, **2018**, 27, 1176-1199	24.6	344
152	Brain regional synchronous activity predicts tauopathy in 3xTgAD mice. *Neurobiology of Aging*, **2018**, 70, 160-169	5.6	18
151	Effects of a dietary ketone ester on hippocampal glycolytic and tricarboxylic acid cycle intermediates and amino acids in a 3xTgAD mouse model of Alzheimer's disease. *Journal of Neurochemistry*, **2017**, 141, 195-207	6	58
150	Mitophagy and Alzheimer's Disease: Cellular and Molecular Mechanisms. *Trends in Neurosciences*, **2017**, 40, 151-166	13.3	330
149	Tomatidine enhances lifespan and healthspan in C. elegans through mitophagy induction via the SKN-1/Nrf2 pathway. *Scientific Reports*, **2017**, 7, 46208	4.9	78
148	Brain metabolism in health, aging, and neurodegeneration. *EMBO Journal*, **2017**, 36, 1474-1492	13	273
147	Adaptive responses of neuronal mitochondria to bioenergetic challenges: Roles in neuroplasticity and disease resistance. *Free Radical Biology and Medicine*, **2017**, 102, 203-216	7.8	130
146	Exercise and BDNF reduce Aβ production by enhancing α-secretase processing of APP. *Journal of Neurochemistry*, **2017**, 142, 286-296	6	77
145	NAD in Aging: Molecular Mechanisms and Translational Implications. *Trends in Molecular Medicine*, **2017**, 23, 899-916	11.5	217
144	Impact of intermittent fasting on health and disease processes. *Ageing Research Reviews*, **2017**, 39, 46-58	12	425
143	DNP, mitochondrial uncoupling, and neuroprotection: A little dab'll do ya. *Alzheimer's and Dementia*, **2017**, 13, 582-591	1.2	58
142	The astrocytic transporter SLC7A10 (Asc-1) mediates glycinergic inhibition of spinal cord motor neurons. *Scientific Reports*, **2016**, 6, 35592	4.9	17
141	Sonic Hedgehog Signaling and Hippocampal Neuroplasticity. *Trends in Neurosciences*, **2016**, 39, 840-850	13.3	62
140	Extracellular Vesicle-Associated Aβ Mediates Trans-Neuronal Bioenergetic and Ca-Handling Deficits in Alzheimer's Disease Models. *Npj Aging and Mechanisms of Disease*, **2016**, 2,	5.5	69

139	Cockayne syndrome group A and B proteins converge on transcription-linked resolution of non-B DNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12502-12507	11.5	56
138	Thidoredxin-2 overexpression fails to rescue chronic high calorie diet induced hippocampal dysfunction. *Experimental Neurology*, **2016**, 275 Pt 1, 126-32	5.7	2
137	Nuclear DNA damage signalling to mitochondria in ageing. *Nature Reviews Molecular Cell Biology*, **2016**, 17, 308-21	48.7	222
136	Mitochondrial SIRT3 Mediates Adaptive Responses of Neurons to Exercise and Metabolic and Excitatory Challenges. *Cell Metabolism*, **2016**, 23, 128-42	24.6	203
135	Mitochondrial Protein PGAM5 Regulates Mitophagic Protection against Cell Necroptosis. *PLoS ONE*, **2016**, 11, e0147792	3.7	78
134	NAD Replenishment Improves Lifespan and Healthspan in Ataxia Telangiectasia Models via Mitophagy and DNA Repair. *Cell Metabolism*, **2016**, 24, 566-581	24.6	273
133	Postnatal TLR2 activation impairs learning and memory in adulthood. *Brain, Behavior, and Immunity*, **2015**, 48, 301-12	16.6	12
132	Hold the salt: vasopressor role for BDNF. *Cell Metabolism*, **2015**, 21, 509-10	24.6	6
131	Combination therapy with lenalidomide and nanoceria ameliorates CNS autoimmunity. *Experimental Neurology*, **2015**, 273, 151-60	5.7	35
130	Novel RNA- and FMRP-binding protein TRF2-S regulates axonal mRNA transport and presynaptic plasticity. *Nature Communications*, **2015**, 6, 8888	17.4	27
129	Inhibition of notch signalling ameliorates experimental inflammatory arthritis. *Annals of the Rheumatic Diseases*, **2015**, 74, 267-74	2.4	58
128	DNA polymerase □deficiency leads to neurodegeneration and exacerbates Alzheimer disease phenotypes. *Nucleic Acids Research*, **2015**, 43, 943-59	20.1	75
127	Telomere shortening in neurological disorders: an abundance of unanswered questions. *Trends in Neurosciences*, **2014**, 37, 256-63	13.3	100
126	Toll-like receptors 2 and 4 modulate autonomic control of heart rate and energy metabolism. *Brain, Behavior, and Immunity*, **2014**, 36, 90-100	16.6	29
125	Fasting: molecular mechanisms and clinical applications. *Cell Metabolism*, **2014**, 19, 181-92	24.6	671
124	BDNF mediates adaptive brain and body responses to energetic challenges. *Trends in Endocrinology and Metabolism*, **2014**, 25, 89-98	8.8	293
123	A high-fat diet and NAD(+) activate Sirt1 to rescue premature aging in cockayne syndrome. *Cell Metabolism*, **2014**, 20, 840-855	24.6	232
122	Meal frequency and timing in health and disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 16647-53	11.5	294

121	Exercise, energy intake, glucose homeostasis, and the brain. *Journal of Neuroscience*, **2014**, 34, 15139-49	6.6	99
120	Adaptive cellular stress pathways as therapeutic targets of dietary phytochemicals: focus on the nervous system. *Pharmacological Reviews*, **2014**, 66, 815-68	22.5	105
119	Evidence that collaboration between HIF-1 and Notch-1 promotes neuronal cell death in ischemic stroke. *Neurobiology of Disease*, **2014**, 62, 286-95	7.5	52
118	TLR4-dependent metabolic changes are associated with cognitive impairment in an animal model of type 1 diabetes. *Biochemical and Biophysical Research Communications*, **2014**, 443, 731-7	3.4	15
117	Elongation factor 2 diphthamide is critical for translation of two IRES-dependent protein targets, XIAP and FGF2, under oxidative stress conditions. *Free Radical Biology and Medicine*, **2014**, 67, 131-8	7.8	33
116	Interventions that improve body and brain bioenergetics for Parkinson's disease risk reduction and therapy. *Journal of Parkinsons Disease*, **2014**, 4, 1-13	5.3	41
115	Superior pattern processing is the essence of the evolved human brain. *Frontiers in Neuroscience*, **2014**, 8, 265	5.1	56
114	Sphingolipid metabolism regulates development and lifespan in Caenorhabditis elegans. *Mechanisms of Ageing and Development*, **2014**, 143-144, 9-18	5.6	53
113	Permeability transition pore-mediated mitochondrial superoxide flashes mediate an early inhibitory effect of amyloid beta1-42 on neural progenitor cell proliferation. *Neurobiology of Aging*, **2014**, 35, 975-89	5.6	49
112	A ketone ester diet exhibits anxiolytic and cognition-sparing properties, and lessens amyloid and tau pathologies in a mouse model of Alzheimer's disease. *Neurobiology of Aging*, **2013**, 34, 1530-9	5.6	216
111	Chronic mild sleep restriction accentuates contextual memory impairments, and accumulations of cortical A and pTau in a mouse model of Alzheimer's disease. *Brain Research*, **2013**, 1529, 200-8	3.7	111
110	Excitation BolsTORs motor neurons in ALS mice. *Neuron*, **2013**, 80, 1-3	13.9	22
109	Molecular control of the amount, subcellular location, and activity state of translation elongation factor 2 in neurons experiencing stress. *Free Radical Biology and Medicine*, **2013**, 61, 61-71	7.8	16
108	Energy intake and exercise as determinants of brain health and vulnerability to injury and disease. *Cell Metabolism*, **2012**, 16, 706-22	24.6	283
107	3xTgAD mice exhibit altered behavior and elevated A after chronic mild social stress. *Neurobiology of Aging*, **2012**, 33, 830.e1-12	5.6	66
106	Soluble amyloid precursor protein- modulates secretase activity and amyloid- generation. *Nature Communications*, **2012**, 3, 777	17.4	110
105	The AAA+ ATPase Thorase regulates AMPA receptor-dependent synaptic plasticity and behavior. *Cell*, **2011**, 145, 284-99	56.2	67
104	Selective vulnerability of neurons in layer II of the entorhinal cortex during aging and Alzheimer's disease. *Neural Plasticity*, **2010**, 2010, 108190	3.3	102

103	An overview of APP processing enzymes and products. *NeuroMolecular Medicine*, **2010**, 12, 1-12	4.6	386
102	Adverse stress, hippocampal networks, and Alzheimer's disease. *NeuroMolecular Medicine*, **2010**, 12, 56-70	4.6	138
101	GLP-1 receptor stimulation preserves primary cortical and dopaminergic neurons in cellular and rodent models of stroke and Parkinsonism. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 1285-90	11.5	414
100	Leptin-mediated cell survival signaling in hippocampal neurons mediated by JAK STAT3 and mitochondrial stabilization. *Journal of Biological Chemistry*, **2008**, 283, 1754-1763	5.4	155
99	A synthetic inhibitor of p53 protects neurons against death induced by ischemic and excitotoxic insults, and amyloid □peptide. *Journal of Neurochemistry*, **2008**, 77, 220-228	6	7
98	Intermittent fasting: fly in the oatmeal. *FASEB Journal*, **2008**, 22, 44-44	0.9	
97	Gene expression atlas of the mouse central nervous system: impact and interactions of age, energy intake and gender. *Genome Biology*, **2007**, 8, R234	18.3	82
96	Energy intake, meal frequency, and health: a neurobiological perspective. *Annual Review of Nutrition*, **2005**, 25, 237-60	9.9	181
95	Pathways towards and away from Alzheimer's disease. *Nature*, **2004**, 430, 631-9	50.4	2342
94	Metal-catalyzed disruption of membrane protein and lipid signaling in the pathogenesis of neurodegenerative disorders. *Annals of the New York Academy of Sciences*, **2004**, 1012, 37-50	6.5	134
93	Infectious agents and age-related neurodegenerative disorders. *Ageing Research Reviews*, **2004**, 3, 105-20	10.2	65
92	Will caloric restriction and folate protect against AD and PD?. *Neurology*, **2003**, 60, 690-5	6.5	96
91	Gene-diet interactions in brain aging and neurodegenerative disorders. *Annals of Internal Medicine*, **2003**, 139, 441-4	8	101
90	Neuronal and glial calcium signaling in Alzheimer's disease. *Cell Calcium*, **2003**, 34, 385-97	4	354
89	Meal size and frequency affect neuronal plasticity and vulnerability to disease: cellular and molecular mechanisms. *Journal of Neurochemistry*, **2003**, 84, 417-31	6	210
88	Mitochondrial potassium channels and uncoupling proteins in synaptic plasticity and neuronal cell death. *Biochemical and Biophysical Research Communications*, **2003**, 304, 539-49	3.4	113
87	Folate and homocysteine metabolism in neural plasticity and neurodegenerative disorders. *Trends in Neurosciences*, **2003**, 26, 137-46	13.3	641
86	Assessing the involvement of telomerase in stem cell biology. *Methods in Molecular Biology*, **2002**, 198, 125-36	1.4	

85	Contributions of mitochondrial alterations, resulting from bad genes and a hostile environment, to the pathogenesis of Alzheimer's disease. *International Review of Neurobiology*, **2002**, 53, 387-409	4.4	27
84	Measuring Oxidative Stress and Interpreting Its Clinical Relevance for Humans **2002**, 131-164		1
83	Involvement of superoxide in pathogenic action of mutations that cause Alzheimer's disease. *Methods in Enzymology*, **2002**, 352, 455-74	1.7	5
82	Folic acid and homocysteine in age-related disease. *Ageing Research Reviews*, **2002**, 1, 95-111	12	109
81	Iodoacetate protects hippocampal neurons against excitotoxic and oxidative injury: involvement of heat-shock proteins and Bcl-2. *Journal of Neurochemistry*, **2001**, 79, 361-70	6	31
80	Brain-derived neurotrophic factor mediates an excitoprotective effect of dietary restriction in mice. *Journal of Neurochemistry*, **2001**, 76, 619-26	6	156
79	Integrin signaling via the PI3-kinase-Akt pathway increases neuronal resistance to glutamate-induced apoptosis. *Journal of Neurochemistry*, **2001**, 76, 1485-96	6	103
78	Selective and biphasic effect of the membrane lipid peroxidation product 4-hydroxy-2,3-nonenal on N-methyl-D-aspartate channels. *Journal of Neurochemistry*, **2001**, 78, 577-89	6	36
77	Differential regulation of telomerase activity and TERT expression during brain development in mice. *Journal of Neuroscience Research*, **2001**, 64, 252-60	4.4	114
76	Emerging roles for telomerase in neuronal development and apoptosis. *Journal of Neuroscience Research*, **2001**, 63, 1-9	4.4	58
75	Presenilin mutations and calcium signaling defects in the nervous and immune systems. *BioEssays*, **2001**, 23, 733-44	4.1	59
74	Perturbed endoplasmic reticulum function, synaptic apoptosis and the pathogenesis of Alzheimer's disease. *Biochemical Society Symposia*, **2001**, 151-62		78
73	Emerging roles for telomerase in neuronal development and apoptosis **2001**, 63, 1		5
72	Differential regulation of telomerase activity and TERT expression during brain development in mice **2001**, 64, 252		5
71	Lysophosphatidic acid induction of neuronal apoptosis and necrosis. *Annals of the New York Academy of Sciences*, **2000**, 905, 132-41	6.5	29
70	A mechanism for the neuroprotective effect of apolipoprotein E: isoform-specific modification by the lipid peroxidation product 4-hydroxynonenal. *Journal of Neurochemistry*, **2000**, 74, 1426-33	6	99
69	Roles of nuclear factor kappaB in neuronal survival and plasticity. *Journal of Neurochemistry*, **2000**, 74, 443-56	6	377
68	The lipid peroxidation product 4-hydroxy-2,3-nonenal increases AP-1-binding activity through caspase activation in neurons. *Journal of Neurochemistry*, **2000**, 74, 159-68	6	135

67	Evidence for the involvement of TNF and NF-kappaB in hippocampal synaptic plasticity. *Synapse*, **2000**, 35, 151-9	2.4	399
66	Pro-apoptotic action of PAR-4 involves inhibition of NF-kappaB activity and suppression of BCL-2 expression. *Journal of Neuroscience Research*, **2000**, 61, 134-9	4.4	84
65	Apoptosis in neurodegenerative disorders. *Nature Reviews Molecular Cell Biology*, **2000**, 1, 120-9	48.7	1203
64	Molecular functionalization of carbon nanotubes and use as substrates for neuronal growth. *Journal of Molecular Neuroscience*, **2000**, 14, 175-82	3.3	550
63	Dietary restriction increases the number of newly generated neural cells, and induces BDNF expression, in the dentate gyrus of rats. *Journal of Molecular Neuroscience*, **2000**, 15, 99-108	3.3	283
62	The prostate apoptosis response-4 protein participates in motor neuron degeneration in amyotrophic lateral sclerosis. *FASEB Journal*, **2000**, 14, 913-24	0.9	76
61	Evidence for the involvement of TNF and NF-Ƀ in hippocampal synaptic plasticity **2000**, 35, 151		3
60	Pro-apoptotic action of PAR-4 involves inhibition of NF-Ƀ activity and suppression of BCL-2 expression **2000**, 61, 134		1
59	Pivotal role of mitochondrial calcium uptake in neural cell apoptosis and necrosis. *Journal of Neurochemistry*, **1999**, 72, 529-40	6	260
58	Increased vulnerability of hippocampal neurons to excitotoxic necrosis in presenilin-1 mutant knock-in mice. *Nature Medicine*, **1999**, 5, 101-6	50.5	422
57	Par-4: an emerging pivotal player in neuronal apoptosis and neurodegenerative disorders. *Journal of Molecular Neuroscience*, **1999**, 13, 17-30	3.3	55
56	Food restriction reduces brain damage and improves behavioral outcome following excitotoxic and metabolic insults. *Annals of Neurology*, **1999**, 45, 8-15	9.4	345
55	Participation of prostate apoptosis response-4 in degeneration of dopaminergic neurons in models of Parkinson's disease. *Annals of Neurology*, **1999**, 46, 587-597	9.4	100
54	Evidence for mitochondrial control of neuronal polarity. *Journal of Neuroscience Research*, **1999**, 56, 8-20	4.4	76
53	Superoxide mediates the cell-death-enhancing action of presenilin-1 mutations. *Journal of Neuroscience Research*, **1999**, 56, 457-70	4.4	53
52	2-Deoxy-D-glucose protects hippocampal neurons against excitotoxic and oxidative injury: evidence for the involvement of stress proteins. *Journal of Neuroscience Research*, **1999**, 57, 48-61	4.4	144
51	Dietary restriction and 2-deoxyglucose administration improve behavioral outcome and reduce degeneration of dopaminergic neurons in models of Parkinson's disease. *Journal of Neuroscience Research*, **1999**, 57, 195-206	4.4	362
50	Establishment and plasticity of neuronal polarity. *Journal of Neuroscience Research*, **1999**, 57, 577-589	4.4	46

49	Dietary restriction and 2-deoxyglucose administration reduce focal ischemic brain damage and improve behavioral outcome: Evidence for a preconditioning mechanism. *Journal of Neuroscience Research*, **1999**, 57, 830-839	4.4	255
48	Apoptotic biochemical cascades in synaptic compartments: Roles in adaptive plasticity and neurodegenerative disorders. *Journal of Neuroscience Research*, **1999**, 58, 152-166	4.4	120
47	Caspase and calpain substrates: Roles in synaptic plasticity and cell death. *Journal of Neuroscience Research*, **1999**, 58, 167-190	4.4	305
46	Compartmentalization of signaling in neurons: Evolution and deployment. *Journal of Neuroscience Research*, **1999**, 58, 2-9	4.4	9
45	Microglial activation resulting from CD40-CD40L interaction after beta-amyloid stimulation. *Science* , **1999**, 286, 2352-5	33.3	310
44	Superoxide mediates the cell-death-enhancing action of presenilin-1 mutations **1999**, 56, 457		3
43	2-deoxy-d-glucose protects hippocampal neurons against excitotoxic and oxidative injury: Evidence for the involvement of stress proteins **1999**, 57, 48		6
42	Dietary restriction and 2-deoxyglucose administration improve behavioral outcome and reduce degeneration of dopaminergic neurons in models of Parkinson's disease **1999**, 57, 195		8
41	Dietary restriction and 2-deoxyglucose administration reduce focal ischemic brain damage and improve behavioral outcome: Evidence for a preconditioning mechanism **1999**, 57, 830		4
40	Caspase and calpain substrates: Roles in synaptic plasticity and cell death **1999**, 58, 167		21
39	Food restriction reduces brain damage and improves behavioral outcome following excitotoxic and metabolic insults **1999**, 45, 8		9
38	Ischemic and excitotoxic brain injury is enhanced in mice lacking the p55 tumor necrosis factor receptor. *Journal of Cerebral Blood Flow and Metabolism*, **1998**, 18, 1283-7	7.3	221
37	Presence of 4-hydroxynonenal in cerebrospinal fluid of patients with sporadic amyotrophic lateral sclerosis. *Annals of Neurology*, **1998**, 44, 696-9	9.4	192
36	Calcium and reactive oxygen species mediate staurosporine-induced mitochondrial dysfunction and apoptosis in PC12 cells. *Journal of Neuroscience Research*, **1998**, 51, 293-308	4.4	300
35	Presenilin-1 mutation alters NGF-induced neurite outgrowth, calcium homeostasis, and transcription factor (AP-1) activation in PC12 cells. *Journal of Neuroscience Research*, **1998**, 52, 618-24	4.4	55
34	Uric acid protects neurons against excitotoxic and metabolic insults in cell culture, and against focal ischemic brain injury in vivo. *Journal of Neuroscience Research*, **1998**, 53, 613-25	4.4	245
33	Lysophosphatidic acid and apoptosis of nerve growth factor-differentiated PC12 cells. *Journal of Neuroscience Research*, **1998**, 53, 685-96	4.4	34
32	4-hydroxynonenal, a lipid peroxidation product, impairs glutamate transport in cortical astrocytes. *Glia*, **1998**, 22, 149-60	9	122

31	Presenilins, the endoplasmic reticulum, and neuronal apoptosis in Alzheimer's disease. *Journal of Neurochemistry*, **1998**, 70, 1-14	6	188
30	Lysophosphatidic acid induces necrosis and apoptosis in hippocampal neurons. *Journal of Neurochemistry*, **1998**, 70, 66-76	6	78
29	Astrocytic gap junctional communication decreases neuronal vulnerability to oxidative stress-induced disruption of Ca2+ homeostasis and cell death. *Journal of Neurochemistry*, **1998**, 70, 958-70	6	187
28	The transcription factor NF-kappaB mediates increases in calcium currents and decreases in NMDA- and AMPA/kainate-induced currents induced by tumor necrosis factor-alpha in hippocampal neurons. *Journal of Neurochemistry*, **1998**, 70, 1876-86	6	211
27	Uric acid protects neurons against excitotoxic and metabolic insults in cell culture, and against focal ischemic brain injury in vivo **1998**, 53, 613		1
26	Activation of NF-kappaB protects hippocampal neurons against oxidative stress-induced apoptosis: evidence for induction of manganese superoxide dismutase and suppression of peroxynitrite production and protein tyrosine nitration. *Journal of Neuroscience Research*, **1997**, 49, 681-97	4.4	466
25	Cell and molecular neurobiology of presenilins: a role for the endoplasmic reticulum in the pathogenesis of Alzheimer's disease?. *Journal of Neuroscience Research*, **1997**, 50, 505-13	4.4	38
24	17Beta-estradiol attenuates oxidative impairment of synaptic Na+/K+-ATPase activity, glucose transport, and glutamate transport induced by amyloid beta-peptide and iron. *Journal of Neuroscience Research*, **1997**, 50, 522-30	4.4	126
23	Isoform-specific modulation by apolipoprotein E of the activities of secreted beta-amyloid precursor protein. *Journal of Neurochemistry*, **1997**, 69, 60-7	6	34
22	Lysophosphatidic acid induces a sustained elevation of neuronal intracellular calcium. *Journal of Neurochemistry*, **1997**, 69, 68-75	6	27
21	Impairment of glucose and glutamate transport and induction of mitochondrial oxidative stress and dysfunction in synaptosomes by amyloid beta-peptide: role of the lipid peroxidation product 4-hydroxynonenal. *Journal of Neurochemistry*, **1997**, 69, 273-84	6	341
20	4-Hydroxynonenal, an aldehydic product of lipid peroxidation, impairs signal transduction associated with muscarinic acetylcholine and metabotropic glutamate receptors: possible action on G alpha(q/11). *Journal of Neurochemistry*, **1997**, 69, 570-80	6	114
19	Lysophosphatidic acid-induced proliferation-related signals in astrocytes. *Journal of Neurochemistry* , **1997**, 69, 1073-84	6	54
18	The lipid peroxidation product, 4-hydroxy-2-trans-nonenal, alters the conformation of cortical synaptosomal membrane proteins. *Journal of Neurochemistry*, **1997**, 69, 1161-9	6	217
17	Ceramide protects hippocampal neurons against excitotoxic and oxidative insults, and amyloid beta-peptide toxicity. *Journal of Neurochemistry*, **1996**, 66, 869-72	6	187
16	Estrogens attenuate and corticosterone exacerbates excitotoxicity, oxidative injury, and amyloid beta-peptide toxicity in hippocampal neurons. *Journal of Neurochemistry*, **1996**, 66, 1836-44	6	662
15	Increased activity-regulating and neuroprotective efficacy of alpha-secretase-derived secreted amyloid precursor protein conferred by a C-terminal heparin-binding domain. *Journal of Neurochemistry*, **1996**, 67, 1882-96	6	285
14	Lysophosphatidic acid decreases glutamate and glucose uptake by astrocytes. *Journal of Neurochemistry*, **1996**, 67, 2300-5	6	38

13	Programmed cell life: anti-apoptotic signaling and therapeutic strategies for neurodegenerative disorders. *Restorative Neurology and Neuroscience*, **1996**, 9, 191-205	2.8	51
12	Amyloid beta-peptide and oxidative cellular injury in Alzheimer's disease. *Molecular Neurobiology*, **1996**, 12, 211-24	6.2	130
11	Activation of K+ channels and suppression of neuronal activity by secreted beta-amyloid-precursor protein. *Nature*, **1996**, 379, 74-8	50.4	303
10	Amyloid □peptide alters thrombin-induced calcium responses in cultured human neural cells. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **1996**, 3, 28-40	2.7	11
9	Role of cyclic GMP in the regulation of neuronal calcium and survival by secreted forms of beta-amyloid precursor. *Journal of Neurochemistry*, **1995**, 64, 2087-96	6	107
8	Cytochalasins protect hippocampal neurons against amyloid beta-peptide toxicity: evidence that actin depolymerization suppresses Ca2+ influx. *Journal of Neurochemistry*, **1995**, 65, 1061-8	6	42
7	Basic fibroblast growth factor selectively increases AMPA-receptor subunit GluR1 protein level and differentially modulates Ca2+ responses to AMPA and NMDA in hippocampal neurons. *Journal of Neurochemistry*, **1995**, 65, 2525-36	6	82
6	Staurosporine, K-252a, and K-252b stabilize calcium homeostasis and promote survival of CNS neurons in the absence of glucose. *Journal of Neurochemistry*, **1994**, 62, 1319-29	6	32
5	Secreted forms of beta-amyloid precursor protein protect against ischemic brain injury. *Journal of Neurochemistry*, **1994**, 63, 781-4	6	187
4	Secreted forms of beta-amyloid precursor protein modulate dendrite outgrowth and calcium responses to glutamate in cultured embryonic hippocampal neurons. *Journal of Neurobiology*, **1994**, 25, 439-50		145
3	Evidence for excitoprotective and intraneuronal calcium-regulating roles for secreted forms of the beta-amyloid precursor protein. *Neuron*, **1993**, 10, 243-54	13.9	723
2	Roles for calcium signaling in structural plasticity and pathology in the hippocampal system. *Hippocampus*, **1993**, 3, 73-87	3.5	33
1	Food restriction reduces brain damage and improves behavioral outcome following excitotoxic and metabolic insults		1