

Increased expression of brain-derived neurotrophic factor  
associated with improved spatial memory and enriched

Neuroscience Letters

138, 153-156

DOI: [10.1016/0304-3940\(92\)90494-r](https://doi.org/10.1016/0304-3940(92)90494-r)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Cortical transynaptic activation of tyrosine kinase receptor trkB messenger RNA expression in rat hippocampus. <i>Neuroscience</i> , 1992, 51, 883-889.	1.1	38
2	Hippocampal nerve growth factor levels are related to spatial learning ability in aged rats. <i>Behavioural Brain Research</i> , 1992, 48, 15-20.	1.2	92
3	Environmental influence on somatostatin levels and gene expression in the rat brain. <i>Brain Research</i> , 1993, 628, 93-98.	1.1	24
4	Subchronic MK-801 treatment to juvenile rats attenuates environmental effects on adult spatial learning. <i>Behavioural Brain Research</i> , 1993, 56, 107-114.	1.2	16
5	Environmental influences on the central nervous system and their implications for the aging rat. <i>Behavioural Brain Research</i> , 1993, 57, 183-191.	1.2	228
6	Brain-derived neurotrophic factor expression after long-term potentiation. <i>Neuroscience Letters</i> , 1993, 160, 232-236.	1.0	158
7	Entorhinal cortex regulation of multiple brain-derived neurotrophic factor promoters in the rat hippocampus. <i>Neuroscience</i> , 1993, 57, 891-896.	1.1	34
8	Activity-dependent and hormonal regulation of neurotrophin mRNA levels in brain-implications for neuronal plasticity. <i>Journal of Neurobiology</i> , 1994, 25, 1362-1372.	3.7	272
9	Glucocorticoids and the expression of mRNAs for neurotrophins, their receptors and GAP-43 in the rat hippocampus. <i>Molecular Brain Research</i> , 1994, 26, 271-276.	2.5	93
10	Stress and glucocorticoids affect the expression of brain-derived neurotrophic factor and neurotrophin-3 mRNAs in the hippocampus. <i>Journal of Neuroscience</i> , 1995, 15, 1768-1777.	1.7	1,345
11	Synaptic plasticity in the hippocampal slice: functional consequences. <i>Journal of Neuroscience Methods</i> , 1995, 59, 11-17.	1.3	21
12	FR discrimination training effects in SHR and microencephalic rats. <i>Pharmacology Biochemistry and Behavior</i> , 1995, 51, 869-876.	1.3	15
13	Identification of brain-derived neurotrophic factor promoter regions mediating tissue-specific, axotomy-, and neuronal activity-induced expression in transgenic mice.. <i>Journal of Cell Biology</i> , 1995, 128, 185-199.	2.3	113
14	Review : Stress, Antidepressant Treatments, and Neurotrophic Factors: Molecular and Cellular Mechanisms. <i>Neuroscientist</i> , 1995, 1, 351-360.	2.6	23
15	Neurotrophins and Neuronal Plasticity. <i>Science</i> , 1995, 270, 593-598.	6.0	1,875
16	Spatiotemporal selective effects on brain-derived neurotrophic factor and trkB messenger RNA in rat hippocampus by electroconvulsive shock. <i>Neuroscience</i> , 1995, 65, 661-670.	1.1	86
17	Rearing environment and radial maze exploration in mice. <i>Behavioural Processes</i> , 1995, 34, 129-140.	0.5	19
18	Differential environmental modulations on locomotor activity, exploration and spatial behaviour in young and old rats. <i>Physiology and Behavior</i> , 1996, 59, 265-271.	1.0	78

#	ARTICLE	IF	CITATIONS
19	Changes in Open Field Behavior, Spatial Memory, and Hippocampal Parvalbumin Immunoreactivity Following Enrichment in Rats Exposed to Neonatal Anoxia. <i>Experimental Neurology</i> , 1996, 139, 25-33.	2.0	86
20	Stress-induced changes in brain-derived neurotrophic factor expression are attenuated in aged Fischer 344/N rats. <i>Neurobiology of Aging</i> , 1996, 17, 859-864.	1.5	60
21	A role for immediate-early transcription factors in learning and memory. <i>Behavior Genetics</i> , 1996, 26, 293-299.	1.4	175
22	The effects of intrahippocampal BDNF and NGF on spatial learning in aged long evans rats. <i>Molecular and Chemical Neuropathology</i> , 1996, 29, 211-226.	1.0	61
23	Apoptosis, Neurotrophic Factors and Neurodegeneration. <i>Reviews in the Neurosciences</i> , 1997, 8, 223-65.	1.4	40
24	Chapter 11 Neurotrophic Factors and the Aging Brain. <i>Advances in Cell Aging and Gerontology</i> , 1997, 2, 299-345.	0.1	14
25	Immobilization stress reduced the expression of neurotrophins and their receptors in the rat brain. <i>Neuroscience Research</i> , 1997, 28, 103-110.	1.0	272
26	Brain-derived neurotrophic factor antisense oligonucleotide impairs memory retention and inhibits long-term potentiation in rats. <i>Neuroscience</i> , 1997, 82, 957-967.	1.1	203
27	Neurotrophin release by neurotrophins: Implications for activity-dependent neuronal plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 13279-13286.	3.3	253
28	Reciprocal changes in expression of mRNA for nerve growth factor and its receptors TrkA and LNGFR in brain of aged rats in relation to maze learning deficits. <i>Experimental Brain Research</i> , 1997, 114, 205-213.	0.7	38
29	Expression of BDNF and trkB as a function of age and cognitive performance. <i>Brain Research</i> , 1998, 812, 200-208.	1.1	169
30	Plasticity and growth factors in injury response. <i>Mental Retardation and Developmental Disabilities Research Reviews</i> , 1998, 4, 223-230.	3.5	11
31	Attenuation of the seizure-induced expression of BDNF mRNA in adult rat brain by an inhibitor of calcium/calmodulin-dependent protein kinases. <i>European Journal of Neuroscience</i> , 1998, 10, 377-387.	1.2	23
32	Chapter 26 Reduced neuronal activity and reactivation in Alzheimer's disease. <i>Progress in Brain Research</i> , 1998, 117, 343-377.	0.9	59
33	Actions of Brain-Derived Neurotrophic Factor in Slices from Rats with Spontaneous Seizures and Mossy Fiber Sprouting in the Dentate Gyrus. <i>Journal of Neuroscience</i> , 1999, 19, 5619-5631.	1.7	109
34	Corticosterone Effects on BDNF mRNA Expression in the Rat Hippocampus During Morris Water Maze Training. <i>Stress</i> , 1999, 3, 173-183.	0.8	48
35	Running increases cell proliferation and neurogenesis in the adult mouse dentate gyrus. <i>Nature Neuroscience</i> , 1999, 2, 266-270.	7.1	3,370
36	Memory formation and the regulation of gene expression. <i>Cellular and Molecular Life Sciences</i> , 1999, 55, 575-592.	2.4	85

#	ARTICLE	IF	CITATIONS
37	Enriched environment increases neurogenesis in the adult rat dentate gyrus and improves spatial memory. , 1999, 39, 569-578.		705
38	BDNF Mediates the Effects of Testosterone on the Survival of New Neurons in an Adult Brain. <i>Neuron</i> , 1999, 22, 53-62.	3.8	257
39	Role of brain-derived neurotrophic factor and presynaptic proteins in passive avoidance learning in day-old domestic chicks. <i>Neuroscience</i> , 1999, 88, 1033-1042.	1.1	40
40	Brain-derived neurotrophic factor transgenic mice exhibit passive avoidance deficits, increased seizure severity and in vitro hyperexcitability in the hippocampus and entorhinal cortex. <i>Neuroscience</i> , 1999, 93, 1491-1506.	1.1	279
41	Changes in brain nerve growth factor levels and nerve growth factor receptors in rats exposed to environmental enrichment for one year. <i>Neuroscience</i> , 1999, 94, 279-286.	1.1	216
42	Behavioural and glial changes in old rats following environmental enrichment. <i>Behavioural Brain Research</i> , 1999, 101, 37-49.	1.2	122
43	Hippocampal BDNF mRNA shows a diurnal regulation, primarily in the exon III transcript. <i>Molecular Brain Research</i> , 1999, 71, 11-22.	2.5	66
44	Experience-Associated Structural Events, Subependymal Cellular Proliferative Activity, and Functional Recovery After Injury to the Central Nervous System. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2000, 20, 1513-1528.	2.4	132
45	Neural consequences of environmental enrichment. <i>Nature Reviews Neuroscience</i> , 2000, 1, 191-198.	4.9	2,147
46	Spatial learning-induced increase in the argyrophilic nucleolar organizer region of dorsolateral telencephalic neurons in goldfish. <i>Brain Research</i> , 2000, 865, 77-84.	1.1	106
47	Two peptidergic drugs increase the synaptophysin immunoreactivity in brains of 6-week-old rats. <i>The Histochemical Journal</i> , 2000, 32, 79-84.	0.6	12
48	Risk Factors and Mechanisms of Alzheimer's Disease Pathogenesis: Obviously and Obviously Not. <i>Journal of Alzheimer's Disease</i> , 2000, 2, 109-112.	1.2	8
49	Degeneration, Trophic Interactions, and Repair of Severed Axons: A Reconsideration of Some Common Assumptions. <i>Neuroscientist</i> , 2000, 6, 88-109.	2.6	22
50	Environmental influence on brain-derived neurotrophic factor messenger RNA expression after middle cerebral artery occlusion in spontaneously hypertensive rats. <i>Neuroscience</i> , 2000, 97, 177-184.	1.1	59
51	Physical activity and antidepressant treatment potentiate the expression of specific brain-derived neurotrophic factor transcripts in the rat hippocampus. <i>Neuroscience</i> , 2000, 101, 305-312.	1.1	311
52	Long-Term Environmental Enrichment Leads to Regional Increases in Neurotrophin Levels in Rat Brain. <i>Experimental Neurology</i> , 2000, 164, 45-52.	2.0	462
53	Neurotrophins and activity-dependent plasticity. <i>Progress in Brain Research</i> , 2000, 128, 183-191.	0.9	234
54	Corticosterone Effects on BDNF Expression in the Hippocampus Implications for Memory Formation. <i>Stress</i> , 2000, 3, 201-208.	0.8	243

#	ARTICLE	IF	CITATIONS
55	Therapeutic Effects of Environmental Enrichment on Cognitive Function and Tissue Integrity Following Severe Traumatic Brain Injury in Rats. <i>Experimental Neurology</i> , 2001, 168, 373-384.	2.0	176
56	Brain-derived neurotrophic factor in the control human brain, and in Alzheimer's disease and Parkinson's disease. <i>Progress in Neurobiology</i> , 2001, 63, 71-124.	2.8	760
57	Effect of hypergravity on the mouse basal expression of NGF and BDNF in the retina, visual cortex and geniculate nucleus: correlative aspects with NPY immunoreactivity. <i>Neuroscience Letters</i> , 2001, 302, 29-32.	1.0	12
58	Physical activity's antidepressant treatment combination: impact on brain-derived neurotrophic factor and behavior in an animal model. <i>Behavioural Brain Research</i> , 2001, 120, 87-95.	1.2	308
59	Upregulation of the immediate early gene arc in the brains of rats exposed to environmental enrichment: implications for molecular plasticity. <i>Molecular Brain Research</i> , 2001, 91, 50-56.	2.5	89
60	Semi-quantitative RT-PCR analysis of environmental influence on P450scc and PNMT mRNA expression in rat adrenal glands. <i>Life Sciences</i> , 2001, 70, 73-80.	2.0	6
61	Differential effects of enrichment on learning and memory function in NR2B transgenic mice. <i>Neuropharmacology</i> , 2001, 41, 779-790.	2.0	294
62	Effects of alcohol on brain-derived neurotrophic factor mRNA expression in discrete regions of the rat hippocampus and hypothalamus. <i>Journal of Neuroscience Research</i> , 2001, 63, 200-208.	1.3	85
63	Enriched environment during development is protective against lead-induced neurotoxicity. <i>Brain Research</i> , 2001, 896, 48-55.	1.1	101
64	Correlation between hippocampal BDNF mRNA expression and memory performance in senescent rats. <i>Brain Research</i> , 2001, 915, 227-233.	1.1	105
65	Changes in BDNF-immunoreactive structures in the hippocampal formation of the aged macaque monkey. <i>Brain Research</i> , 2001, 918, 191-196.	1.1	76
66	Stress Hormone-Related Psychopathology: Pathophysiological and Treatment Implications. <i>World Journal of Biological Psychiatry</i> , 2001, 2, 115-143.	1.3	116
67	Is LTP in the Hippocampus a Useful Model for Learning-Related Alterations in Gene Expression?. <i>Reviews in the Neurosciences</i> , 2001, 12, 289-96.	1.4	4
68	Alterations in BDNF and Synapsin I within the Occipital Cortex and Hippocampus after Mild Traumatic Brain Injury in the Developing Rat: Reflections of Injury-Induced Neuroplasticity. <i>Journal of Neurotrauma</i> , 2002, 19, 803-814.	1.7	83
69	From Acquisition to Consolidation: On the Role of Brain-Derived Neurotrophic Factor Signaling in Hippocampal-Dependent Learning. <i>Learning and Memory</i> , 2002, 9, 224-237.	0.5	593
70	Influence of Enriched Environment on Spatial Learning following Cerebral Insult. <i>Reviews in the Neurosciences</i> , 2002, 13, 347-64.	1.4	16
71	Stress, Metaplasticity, and Antidepressants. <i>Current Molecular Medicine</i> , 2002, 2, 629-638.	0.6	107
72	Environmental enrichment and the brain. <i>Progress in Brain Research</i> , 2002, 138, 109-133.	0.9	219

#	ARTICLE	IF	CITATIONS
73	Complexity of sensory environment drives the expression of candidate-plasticity gene, nerve growth factor induced-A. <i>Neuroscience</i> , 2002, 112, 573-582.	1.1	71
74	Environmental enrichment attenuates cognitive deficits, but does not alter neurotrophin gene expression in the hippocampus following lateral fluid percussion brain injury. <i>Neuroscience</i> , 2002, 112, 631-637.	1.1	83
75	Environmental influences on functional outcome after a cortical infarct in the rat. <i>Brain Research Bulletin</i> , 2002, 58, 315-321.	1.4	111
76	Psychological stress and environmental adaptation in enriched vs. impoverished housed rats. <i>Pharmacology Biochemistry and Behavior</i> , 2002, 73, 193-207.	1.3	171
77	Environmental influences on brain neurotrophins in rats. <i>Pharmacology Biochemistry and Behavior</i> , 2002, 73, 167-175.	1.3	172
78	Environmental manipulation differentially alters c-Fos expression in amygdaloid nuclei following aversive conditioning. <i>Brain Research</i> , 2002, 957, 91-98.	1.1	42
79	Effects of pre- and postnatal stimulation on developmental, emotional, and cognitive aspects in rodents: A review. <i>Developmental Psychobiology</i> , 2002, 41, 373-387.	0.9	174
81	Neuronal Plasticity and Dendritic Spines: Effect of Environmental Enrichment on Intact and Postischemic Rat Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002, 22, 89-96.	2.4	222
82	Rapid induction of BDNF expression in the hippocampus during immobilization stress challenge in adult rats. <i>Hippocampus</i> , 2003, 13, 646-655.	0.9	221
83	Environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure. <i>Annals of Neurology</i> , 2003, 53, 50-56.	2.8	183
84	The influence of specific noradrenergic and serotonergic lesions on the expression of hippocampal brain-derived neurotrophic factor transcripts following voluntary physical activity. <i>Neuroscience</i> , 2003, 119, 721-732.	1.1	99
85	BDNF and Activity-Dependent Synaptic Modulation. <i>Learning and Memory</i> , 2003, 10, 86-98.	0.5	808
86	Environmental Enrichment Exacerbates Amyloid Plaque Formation in a Transgenic Mouse Model of Alzheimer Disease. <i>Journal of Neuropathology and Experimental Neurology</i> , 2003, 62, 1220-1227.	0.9	190
87	Brain-Derived Neurotrophic Factor Activation of NFAT (Nuclear Factor of Activated T-cells) 1 in the Hippocampus Mediates Neurotrophin-Mediated Gene Expression. <i>Journal of Neuroscience</i> , 2003, 23, 8125-8134.	1.7	141
89	Paradoxical Effects of Cortical Impact Injury on Environmentally Enriched Rats. <i>Journal of Neurotrauma</i> , 2004, 21, 513-519.	1.7	23
90	Regulation of neurogenesis by neurotrophins: implications in hippocampus-dependent memory. <i>Neuron Glia Biology</i> , 2004, 1, 377-384.	2.0	30
91	Environmental enrichment affects striatal graft morphology and functional recovery. <i>European Journal of Neuroscience</i> , 2004, 19, 159-168.	1.2	60
92	Neurotrophins induce short-term and long-term changes of cortical neurotrophin expression. <i>European Journal of Neuroscience</i> , 2004, 20, 701-708.	1.2	28

#	ARTICLE	IF	CITATIONS
93	Peripubertal environmental enrichment reverses the effects of maternal care on hippocampal development and glutamate receptor subunit expression. <i>European Journal of Neuroscience</i> , 2004, 20, 1355-1362.	1.2	176
94	Environmental enrichment reverses learning impairment in the Morris water maze after focal cerebral ischemia in rats. <i>European Journal of Neuroscience</i> , 2004, 19, 2288-2298.	1.2	114
95	Physiology of BDNF: focus on hypothalamic function. <i>Frontiers in Neuroendocrinology</i> , 2004, 25, 77-107.	2.5	313
96	Acute social defeat reduces neurotrophin expression in brain cortical and subcortical areas in mice. <i>Brain Research</i> , 2004, 1025, 10-20.	1.1	172
97	Neurogenesis and Neuroadaptation. <i>NeuroMolecular Medicine</i> , 2004, 5, 001-010.	1.8	48
98	A new brain-derived neurotrophic factor transcript and decrease in brain-derived neurotrophic factor transcripts 1, 2 and 3 in Alzheimer's disease parietal cortex. <i>Journal of Neurochemistry</i> , 2004, 82, 1058-1064.	2.1	122
99	Acceleration of Visual System Development by Environmental Enrichment. <i>Journal of Neuroscience</i> , 2004, 24, 4840-4848.	1.7	240
100	Effect of neonatal handling and paternal care on offspring cognitive development in the monogamous California mouse ( <i>Peromyscus californicus</i> ). <i>Hormones and Behavior</i> , 2004, , .	1.0	0
101	Prophylactic activation of neuroprotective stress response pathways by dietary and behavioral manipulations. <i>NeuroRx</i> , 2004, 1, 111-116.	6.0	119
102	EXPERIENCE-DEPENDENT IMMEDIATE EARLY GENE EXPRESSION IN THE ADULT CENTRAL NERVOUS SYSTEM: EVIDENCE FROM ENRICHED-ENVIRONMENT STUDIES. <i>International Journal of Neuroscience</i> , 2004, 114, 321-333.	0.8	68
103	Effect of neonatal handling and paternal care on offspring cognitive development in the monogamous California mouse ( <i>Peromyscus californicus</i> ). <i>Hormones and Behavior</i> , 2004, 46, 30-38.	1.0	94
104	Long-term effects of the periadolescent environment on exploratory activity and aggressive behaviour in mice: social versus physical enrichment. <i>Physiology and Behavior</i> , 2004, 81, 443-453.	1.0	100
105	Recovery from brain injury in animals: relative efficacy of environmental enrichment, physical exercise or formal training (1990-2002). <i>Progress in Neurobiology</i> , 2004, 72, 167-182.	2.8	294
106	On dendrites in Down syndrome and DS murine models: a spiny way to learn. <i>Progress in Neurobiology</i> , 2004, 74, 111-126.	2.8	124
107	Environmental enrichment results in cortical and subcortical changes in levels of synaptophysin and PSD-95 proteins. <i>Neurobiology of Learning and Memory</i> , 2004, 81, 200-210.	1.0	171
108	Transgenic mice overexpressing the full-length neurotrophin receptor <i>trkB</i> exhibit increased activation of the <i>trkB</i> - <i>PLC<math>\beta</math>3</i> pathway, reduced anxiety, and facilitated learning. <i>Molecular and Cellular Neurosciences</i> , 2004, 26, 166-181.	1.0	165
109	Regulation of late-phase LTP and long-term memory in normal and aging hippocampus: role of secreted proteins tPA and BDNF. <i>Ageing Research Reviews</i> , 2004, 3, 407-430.	5.0	277
110	Epigenetic control of neurobehavioural plasticity: the role of neurotrophins. <i>Behavioural Pharmacology</i> , 2004, 15, 353-362.	0.8	110

#	ARTICLE	IF	CITATIONS
111	Environmental Enrichment Facilitates Amygdala Kindling but Reduces Kindling-Induced Fear in Male Rats.. Behavioral Neuroscience, 2004, 118, 1128-1133.	0.6	20
112	Chronic food restriction enhances memory in mice ??? analysis with matched drive levels. NeuroReport, 2005, 16, 1129-1133.	0.6	44
113	Moderate Fetal Alcohol Exposure Impairs the Neurogenic Response to an Enriched Environment in Adult Mice. Alcoholism: Clinical and Experimental Research, 2005, 29, 2053-2062.	1.4	77
114	Nature, nurture and neurology: gene-environment interactions in neurodegenerative disease. FEBS Journal, 2005, 272, 2347-2361.	2.2	87
115	Proliferation zones in the salmon telencephalon and evidence for environmental influence on proliferation rate. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2005, 141, 327-335.	0.8	80
116	Neurogenesis. , 2005, , 261-289.		0
117	Brain-Derived Neurotrophic Factor and Antidepressant Activity. Current Pharmaceutical Design, 2005, 11, 1495-1510.	0.9	147
118	Reversal of Neuromotor and Cognitive Dysfunction in an Enriched Environment Combined with Multimodal Early Onset Stimulation after Traumatic Brain Injury in Rats. Journal of Neurotrauma, 2005, 22, 772-782.	1.7	56
119	Locus Ceruleus Control of Slow-Wave Homeostasis. Journal of Neuroscience, 2005, 25, 4503-4511.	1.7	127
120	Adult Neurogenesis: From Precursors to Network and Physiology. Physiological Reviews, 2005, 85, 523-569.	13.1	882
121	Environmental enrichment promotes improved spatial abilities and enhanced dendritic growth in the rat. Behavioural Brain Research, 2005, 163, 78-90.	1.2	421
122	A "deficient environment" in prenatal life may compromise systems important for cognitive function by affecting BDNF in the hippocampus. Experimental Neurology, 2005, 192, 235-243.	2.0	38
123	Brain-derived neurotrophic factor, phosphorylated cyclic AMP response element binding protein and neuropeptide Y decline as early as middle age in the dentate gyrus and CA1 and CA3 subfields of the hippocampus. Experimental Neurology, 2005, 195, 353-371.	2.0	203
124	Caloric restriction does not reverse aging-related changes in hippocampal BDNF. Neurobiology of Aging, 2005, 26, 683-688.	1.5	53
125	License to Run: Exercise Impacts Functional Plasticity in the Intact and Injured Central Nervous System by Using Neurotrophins. Neurorehabilitation and Neural Repair, 2005, 19, 283-295.	1.4	354
126	Cognitive and Physical Activity Differently Modulate Disease Progression in the Amyloid Precursor Protein (APP)-23 Model of Alzheimer's Disease. Biological Psychiatry, 2006, 60, 1314-1323.	0.7	271
127	Neurotrophin levels and behaviour in BALB/c mice: Impact of intermittent exposure to individual housing and wheel running. Behavioural Brain Research, 2006, 167, 1-8.	1.2	33
128	Influence of differential housing on emotional behaviour and neurotrophin levels in mice. Behavioural Brain Research, 2006, 169, 10-20.	1.2	168



#	ARTICLE	IF	CITATIONS
129	Environmental enrichment promotes neurogenesis and changes the extracellular concentrations of glutamate and GABA in the hippocampus of aged rats. <i>Brain Research Bulletin</i> , 2006, 70, 8-14.	1.4	138
130	Contributions of undernutrition and handling to huddling development of rats. <i>Physiology and Behavior</i> , 2006, 89, 543-551.	1.0	11
131	Effect of early isolation on signal transfer in the entorhinal cortexâ€“dentateâ€“hippocampal system. <i>Neuroscience</i> , 2006, 137, 875-890.	1.1	17
132	Insulin-like growth factor I interfaces with brain-derived neurotrophic factor-mediated synaptic plasticity to modulate aspects of exercise-induced cognitive function. <i>Neuroscience</i> , 2006, 140, 823-833.	1.1	462
133	Sexual Behaviour Induces the Expression of Activity-Regulated Cytoskeletal Protein and Modifies Neuronal Morphology in the Female Rat Ventromedial Hypothalamus. <i>Journal of Neuroendocrinology</i> , 2006, 18, 857-864.	1.2	28
134	The maturation of the acetylcholine system in the dentate gyrus of gerbils ( <i>Meriones unguiculatus</i> ) is affected by epigenetic factors. <i>Journal of Neural Transmission</i> , 2006, 113, 113-124.	1.4	13
135	Response to novelty, social and self-control behaviors, in rats exposed to neonatal anoxia: modulatory effects of an enriched environment. <i>Psychopharmacology</i> , 2006, 184, 155-165.	1.5	36
136	Revenge of the â€œSitâ€: How lifestyle impacts neuronal and cognitive health through molecular systems that interface energy metabolism with neuronal plasticity. <i>Journal of Neuroscience Research</i> , 2006, 84, 699-715.	1.3	258
137	The Impact of Environment in Comparison with Moderate Physical Exercise and Dietary Restriction on BDNF in the Cerebral Parietotemporal Cortex of Aged Sprague-Dawley Rats. <i>Gerontology</i> , 2006, 52, 377-381.	1.4	15
140	Learning Decreases A $\beta$ 56 and Tau Pathology and Ameliorates Behavioral Decline in 3xTg-AD Mice. <i>Journal of Neuroscience</i> , 2007, 27, 751-761.	1.7	123
141	Differential regional expression of brain-derived neurotrophic factor following olfactory fear learning. <i>Learning and Memory</i> , 2007, 14, 816-820.	0.5	35
142	Functional Recovery in Rats With Chronic Spinal Cord Injuries After Exposure to an Enriched Environment. <i>Journal of Spinal Cord Medicine</i> , 2007, 30, 147-155.	0.7	57
143	An enriched environment improves cognitive performance after early-life status epilepticus accompanied by an increase in phosphorylation of extracellular signal-regulated kinase 2. <i>Epilepsy and Behavior</i> , 2007, 11, 303-309.	0.9	17
144	Role of brain-derived neurotrophic factor in Huntington's disease. <i>Progress in Neurobiology</i> , 2007, 81, 294-330.	2.8	486
145	Short-term exposure to an enriched environment enhances dendritic branching but not brain-derived neurotrophic factor expression in the hippocampus of rats with ventral subicular lesions. <i>Neuroscience</i> , 2007, 144, 412-423.	1.1	67
146	Enriched environment enhances transplanted subventricular zone stem cell migration and functional recovery after stroke. <i>Neuroscience</i> , 2007, 146, 31-40.	1.1	140
147	EARLY PREWEANING METHAMPHETAMINE AND POSTWEANING REARING CONDITIONS INTERFERE WITH THE DEVELOPMENT OF PERIPHERAL STRESS PARAMETERS AND NEURAL GROWTH FACTORS IN GERBILS. <i>International Journal of Neuroscience</i> , 2007, 117, 1621-1638.	0.8	4
148	Enviromimetics: exploring gene environment interactions to identify therapeutic targets for brain disorders. <i>Expert Opinion on Therapeutic Targets</i> , 2007, 11, 899-913.	1.5	58

#	ARTICLE	IF	CITATIONS
149	Norepinephrine depletion facilitates recovery of function after focal ischemia in the rat. <i>European Journal of Neuroscience</i> , 2007, 26, 1822-1831.	1.2	9
150	Lack of effect of antipsychotics on BDNF and NGF levels in hippocampus of Wistar rats. <i>Metabolic Brain Disease</i> , 2008, 23, 213-219.	1.4	15
151	Combined neonatal stress and youngâ€”adult glucocorticoid stimulation in rats reduce BDNF expression in hippocampus: Effects on learning and memory. <i>Hippocampus</i> , 2008, 18, 655-667.	0.9	119
152	Environmental Enrichment Alters Neurotrophin Levels After Fetal Alcohol Exposure in Rats. <i>Alcoholism: Clinical and Experimental Research</i> , 2008, 32, 1741-1751.	1.4	21
153	New insights into brain BDNF function in normal aging and Alzheimer disease. <i>Brain Research Reviews</i> , 2008, 59, 201-220.	9.1	482
154	Positive Modulators of AMPA-Type Glutamate Receptors. , 2008, , 299-326.		0
155	Environmental enrichment mitigates the effects of basal forebrain lesions on cognitive flexibility. <i>Neuroscience</i> , 2008, 154, 444-453.	1.1	34
156	Sex- and age-dependent effects of early postnatal sibling deprivation on spatial learning and memory in adult rats. <i>Behavioural Brain Research</i> , 2008, 186, 138-142.	1.2	5
157	Chronic administration of DHA and UMP improves the impaired memory of environmentally impoverished rats. <i>Behavioural Brain Research</i> , 2008, 191, 11-16.	1.2	53
158	Early-Life Iron Deficiency Anemia Alters Neurotrophic Factor Expression and Hippocampal Neuron Differentiation in Male Rats <sup>2</sup> . <i>Journal of Nutrition</i> , 2008, 138, 2495-2501.	1.3	76
159	Prenatal Restraint Stress Generates Two Distinct Behavioral and Neurochemical Profiles in Male and Female Rats. <i>PLoS ONE</i> , 2008, 3, e2170.	1.1	296
160	Synaptic Commitment: Developmentally Regulated Reciprocal Changes in Hippocampal Granule Cell NMDA and AMPA Receptors Over the Lifespan. <i>Journal of Neurophysiology</i> , 2008, 99, 2760-2768.	0.9	12
161	Environmental enrichment alters dentate granule cell morphology in oldestâ€”old rat. <i>Journal of Cellular and Molecular Medicine</i> , 2009, 13, 1845-1856.	1.6	25
162	Antagonism of glutamate receptors in the CA1 to perirhinal cortex projection prevents long-term potentiation and attenuates levels of brain-derived neurotrophic factor. <i>Brain Research</i> , 2009, 1265, 53-64.	1.1	13
163	Environmental enrichment enhances spatial cognition in rats by reducing thigmotaxis (wall hugging) during testing. <i>Animal Behaviour</i> , 2009, 77, 1459-1464.	0.8	69
164	Changes in spatial memory and BDNF expression to concurrent dietary restriction and voluntary exercise. <i>Hippocampus</i> , 2010, 20, 637-645.	0.9	68
165	Olfactory association learning and brainâ€”derived neurotrophic factor in an animal model of early deprivation. <i>Developmental Psychobiology</i> , 2009, 51, 333-344.	0.9	21
166	Controlled contusion injury alters molecular systems associated with cognitive performance. <i>Journal of Neuroscience Research</i> , 2009, 87, 795-805.	1.3	61

#	ARTICLE	IF	CITATIONS
167	Influence of environmental manipulation on exploratory behaviour in male BDNF knockout mice. <i>Behavioural Brain Research</i> , 2009, 197, 339-346.	1.2	47
168	Stress and Adult Neurogenesis in the Mammalian Central Nervous System. , 0, , 71-91.		4
169	Effect of wild ginseng on scopolamine-induced acetylcholine depletion in the rat hippocampus. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 62, 263-271.	1.2	43
170	Increase of GABAA receptor-mediated tonic inhibition in dentate granule cells after traumatic brain injury. <i>Neurobiology of Disease</i> , 2010, 38, 464-475.	2.1	63
171	Long-term treatment with antidepressants, but not environmental stimulation, induces expression of NP2 mRNA in hippocampus and medial habenula. <i>Brain Research</i> , 2010, 1328, 25-33.	1.1	10
172	The role of brain-derived neurotrophic factor in different animal models of neuropathic pain. <i>European Journal of Pain</i> , 2010, 14, 473.e1-9.	1.4	45
173	Brain-Derived Neurotrophic Factor: A Dynamic Gatekeeper of Neural Plasticity. <i>Current Molecular Pharmacology</i> , 2010, 3, 12-29.	0.7	332
174	Complex environment experience rescues impaired neurogenesis, enhances synaptic plasticity, and attenuates neuropathology in familial Alzheimer's disease-linked APP <sup>swE</sup> /PS1 <sup>E9</sup> mice. <i>FASEB Journal</i> , 2010, 24, 1667-1681.	0.2	162
175	Empirical Comparison of Typical and Atypical Environmental Enrichment Paradigms on Functional and Histological Outcome after Experimental Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2010, 27, 1047-1057.	1.7	100
176	Normal Hearing Is Required for the Emergence of Long-Lasting Inhibitory Potentiation in Cortex. <i>Journal of Neuroscience</i> , 2010, 30, 331-341.	1.7	51
177	Sensorimotor modulation of mood and depression: An integrative review. <i>Behavioural Brain Research</i> , 2010, 207, 249-264.	1.2	75
178	The effects of gestational and postpartum environmental enrichment on the mother rat: A preliminary investigation. <i>Behavioural Brain Research</i> , 2010, 208, 213-223.	1.2	30
179	Krill phosphatidylserine improves learning and memory in Morris water maze in aged rats. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2010, 34, 1085-1093.	2.5	52
180	An enriched environment mitigates the brain-disruptive effects of prenatal diethylstilbestrol exposure in mice. <i>Neuroscience</i> , 2010, 169, 223-228.	1.1	16
181	The Pathophysiology of Concussions in Youth. <i>Physical Medicine and Rehabilitation Clinics of North America</i> , 2011, 22, 577-602.	0.7	84
182	NIH-3T3 fibroblast transplants enhance host regeneration and improve spatial learning in ventral subicular lesioned rats. <i>Behavioural Brain Research</i> , 2011, 218, 315-324.	1.2	13
183	The effects of environmental enrichment in the chick anxiety-depression model. <i>Behavioural Brain Research</i> , 2011, 221, 276-281.	1.2	11
184	Prenatal stress in rat causes long-term spatial memory deficit and hippocampus MRI abnormality: Differential effects of postweaning enriched environment. <i>Neurochemistry International</i> , 2011, 58, 434-441.	1.9	38

#	ARTICLE	IF	CITATIONS
185	Effects of increased opportunity for physical exercise and learning experiences on recognition memory and brain-derived neurotrophic factor levels in brain and serum of rats. <i>Neuroscience</i> , 2011, 199, 284-291.	1.1	24
186	Effects of environmental enrichment and voluntary exercise on neurogenesis, learning and memory, and pattern separation: BDNF as a critical variable?. <i>Seminars in Cell and Developmental Biology</i> , 2011, 22, 536-542.	2.3	207
187	Enriched environment effects on behavior, memory and BDNF in low and high exploratory mice. <i>Physiology and Behavior</i> , 2011, 102, 475-480.	1.0	67
188	Moderate Environmental Enrichment Mitigates Tauopathy in a Neurofibrillary Tangle Mouse Model. <i>Journal of Neuropathology and Experimental Neurology</i> , 2011, 70, 610-621.	0.9	29
189	Brain-derived neurotrophic factor: the link between amyloid- $\beta^2$ and memory loss. <i>Future Neurology</i> , 2011, 6, 627-639.	0.9	48
190	Early-life stress and cognitive outcome. <i>Psychopharmacology</i> , 2011, 214, 121-130.	1.5	90
191	Hippocampal epigenetic modification at the brain-derived neurotrophic factor gene induced by an enriched environment. <i>Hippocampus</i> , 2011, 21, 127-132.	0.9	167
192	Altering BDNF expression by genetics and/or environment: Impact for emotional and depression-like behaviour in laboratory mice. <i>Neuroscience and Biobehavioral Reviews</i> , 2011, 35, 599-611.	2.9	99
193	Running is the neurogenic and neurotrophic stimulus in environmental enrichment. <i>Learning and Memory</i> , 2011, 18, 605-609.	0.5	315
194	BDNF increases with behavioral enrichment and an antioxidant diet in the aged dog. <i>Neurobiology of Aging</i> , 2012, 33, 546-554.	1.5	87
195	Motor Protein KIF1A Is Essential for Hippocampal Synaptogenesis and Learning Enhancement in an Enriched Environment. <i>Neuron</i> , 2012, 73, 743-757.	3.8	124
196	Behavioral effects of environmental enrichment during gestation in WKY and Wistar rats. <i>Behavioural Brain Research</i> , 2012, 233, 245-255.	1.2	46
197	Effects of Environmental Enrichment Exposure on Synaptic Transmission and Plasticity in the Hippocampus. <i>Current Topics in Behavioral Neurosciences</i> , 2012, 15, 165-187.	0.8	59
198	Environmental enrichment in male CD-1 mice promotes aggressive behaviors and elevated corticosterone and brain norepinephrine activity in response to a mild stressor. <i>Stress</i> , 2012, 15, 354-360.	0.8	46
199	Blueberry supplementation induces spatial memory improvements and region-specific regulation of hippocampal BDNF mRNA expression in young rats. <i>Psychopharmacology</i> , 2012, 223, 319-330.	1.5	102
200	It was the best of times, it was the worst of times: A psychophysiology's view of cognitive aging. <i>Psychophysiology</i> , 2012, 49, 283-304.	1.2	149
201	Neurogenesis and Neural Plasticity. <i>Current Topics in Behavioral Neurosciences</i> , 2013, , .	0.8	7
202	The Combined Effect of Sleep Deprivation and Western Diet on Spatial Learning and Memory: Role of BDNF and Oxidative Stress. <i>Journal of Molecular Neuroscience</i> , 2013, 50, 124-133.	1.1	91

#	ARTICLE	IF	CITATIONS
203	Melatonin ameliorates cognitive impairment induced by sleep deprivation in rats: Role of oxidative stress, BDNF and CaMKII. <i>Behavioural Brain Research</i> , 2013, 256, 72-81.	1.2	108
204	Combined prenatal and postnatal butyl paraben exposure produces autism-like symptoms in offspring: Comparison with valproic acid autistic model. <i>Pharmacology Biochemistry and Behavior</i> , 2013, 111, 102-110.	1.3	56
205	The activity-dependent transcription factor NPAS4 regulates domain-specific inhibition. <i>Nature</i> , 2013, 503, 121-125.	13.7	246
206	Environmental Enrichment for Animals Used in Research. , 2013, , 75-94.		5
207	Environmental enrichment promotes neural plasticity and cognitive ability in fish. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20131331.	1.2	193
208	Rearing environment, sex and developmental lead exposure modify gene expression in the hippocampus of behaviorally naïve animals. <i>Neurochemistry International</i> , 2013, 62, 510-520.	1.9	20
209	Age-dependent effects of environmental enrichment on brain networks and spatial memory in Wistar rats. <i>Neuroscience</i> , 2013, 248, 43-53.	1.1	22
210	GSK-3 $\beta$ overexpression causes reversible alterations on postsynaptic densities and dendritic morphology of hippocampal granule neurons in vivo. <i>Molecular Psychiatry</i> , 2013, 18, 451-460.	4.1	117
211	Binding of TFIIC to SINE Elements Controls the Relocation of Activity-Dependent Neuronal Genes to Transcription Factories. <i>PLoS Genetics</i> , 2013, 9, e1003699.	1.5	65
212	Translational Findings on Brain-Derived Neurotrophic Factor and Anxiety: Contributions from Basic Research to Clinical Practice. <i>Neuropsychobiology</i> , 2013, 68, 129-138.	0.9	2,900
213	Estrogen Receptor $\alpha$ Functions in the Regulation of Motivation and Spatial Cognition in Young Male Rats. <i>PLoS ONE</i> , 2013, 8, e79303.	1.1	11
214	Standardized Environmental Enrichment Supports Enhanced Brain Plasticity in Healthy Rats and Prevents Cognitive Impairment in Epileptic Rats. <i>PLoS ONE</i> , 2013, 8, e53888.	1.1	115
215	Dietary Levels of Pure Flavonoids Improve Spatial Memory Performance and Increase Hippocampal Brain-Derived Neurotrophic Factor. <i>PLoS ONE</i> , 2013, 8, e63535.	1.1	134
216	Environmental enrichment causes a global potentiation of neuronal responses across stimulus complexity and lamina of sensory cortex. <i>Frontiers in Cellular Neuroscience</i> , 2013, 7, 124.	1.8	27
217	Environmental enrichment and the sensory brain: the role of enrichment in remediating brain injury. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 156.	1.2	90
218	Synaptic regulation of affective behaviors; role of BDNF. <i>Neuropharmacology</i> , 2014, 76, 684-695.	2.0	89
219	Huntington's Disease. <i>Handbook of Experimental Pharmacology</i> , 2014, 220, 357-409.	0.9	90
221	Neurotrophins: Transcription and Translation. <i>Handbook of Experimental Pharmacology</i> , 2014, 220, 67-100.	0.9	90

#	ARTICLE	IF	CITATIONS
222	Environment and Brain Plasticity: Towards an Endogenous Pharmacotherapy. <i>Physiological Reviews</i> , 2014, 94, 189-234.	13.1	340
223	Environmental Enrichment as a Viable Neurorehabilitation Strategy for Experimental Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2014, 31, 873-888.	1.7	82
224	Transformation of cortical and hippocampal neural circuit by environmental enrichment. <i>Neuroscience</i> , 2014, 280, 282-298.	1.1	76
225	Enrichment and individual housing reinforce the differences in aggressiveness and amphetamine response in 129S6/SvEv and C57BL/6 strains. <i>Behavioural Brain Research</i> , 2014, 267, 66-73.	1.2	25
226	Association Between Psychiatric Disorders and Iron Deficiency Anemia Among Children And Adolescents: A Nationwide Population-Based Study. , 2015, , 277-296.		0
227	Life-long environmental enrichment counteracts spatial learning, reference and working memory deficits in middle-aged rats subjected to perinatal asphyxia. <i>Frontiers in Behavioral Neuroscience</i> , 2014, 8, 406.	1.0	25
228	Mind, Brain and Education: A Decade of Evolution. <i>Mind, Brain, and Education</i> , 2015, 9, 64-71.	0.9	29
229	BDNF contributes to the facilitation of hippocampal synaptic plasticity and learning enabled by environmental enrichment. <i>Hippocampus</i> , 2015, 25, 1-15.	0.9	150
230	Cellular and molecular neuronal plasticity. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2015, 128, 681-690.	1.0	17
231	Effects of different timing of stress on corticosterone, BDNF and memory in male rats. <i>Physiology and Behavior</i> , 2015, 139, 459-467.	1.0	37
232	Environmental enrichment modulates intrinsic cellular excitability of hippocampal CA1 pyramidal cells in a housing duration and anatomical location-dependent manner. <i>Behavioural Brain Research</i> , 2015, 292, 209-218.	1.2	14
233	Analyzing dendritic spine pathology in Alzheimer's disease: problems and opportunities. <i>Acta Neuropathologica</i> , 2015, 130, 1-19.	3.9	154
234	Found in translation: Understanding the biology and behavior of experimental traumatic brain injury. <i>Neuroscience and Biobehavioral Reviews</i> , 2015, 58, 123-146.	2.9	75
235	Environmental Enrichment Ameliorates Behavioral Impairments Modeling Schizophrenia in Mice Lacking Metabotropic Glutamate Receptor 5. <i>Neuropsychopharmacology</i> , 2015, 40, 1947-1956.	2.8	58
236	Sucrose-induced analgesia during early life modulates adulthood learning and memory formation. <i>Physiology and Behavior</i> , 2015, 145, 84-90.	1.0	25
237	Effects of environmental enrichment on behavioral deficits and alterations in hippocampal BDNF induced by prenatal exposure to morphine in juvenile rats. <i>Neuroscience</i> , 2015, 305, 372-383.	1.1	61
238	Increasing Spontaneous Retinal Activity before Eye Opening Accelerates the Development of Geniculate Receptive Fields. <i>Journal of Neuroscience</i> , 2015, 35, 14612-14623.	1.7	14
239	Preventive and therapeutic effect of treadmill running on chronic stress-induced memory deficit in rats. <i>Journal of Bodywork and Movement Therapies</i> , 2015, 19, 238-245.	0.5	16

#	ARTICLE	IF	CITATIONS
240	Oral administration of squid lecithin-transphosphatidylated phosphatidylserine improves memory impairment in aged rats. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2015, 56, 1-10.	2.5	19
242	Environmental Intervention as a Therapy for Adverse Programming by Ancestral Stress. <i>Scientific Reports</i> , 2016, 6, 37814.	1.6	55
243	Environmental enrichment as an intervention for adverse health outcomes of prenatal stress. <i>Environmental Epigenetics</i> , 2016, 2, dvw013.	0.9	48
244	Modulation of Hallmarks of Brain Aging by Environmental Enrichment. <i>Oxidative Stress in Applied Basic Research and Clinical Practice</i> , 2016, , 303-319.	0.4	0
245	Inflammation, Aging, and Oxidative Stress. <i>Oxidative Stress in Applied Basic Research and Clinical Practice</i> , 2016, , .	0.4	9
246	Sustained lentiviral-mediated overexpression of microRNA124a in the dentate gyrus exacerbates anxiety- and autism-like behaviors associated with neonatal isolation in rats. <i>Behavioural Brain Research</i> , 2016, 311, 298-308.	1.2	43
247	Insights into neuroepigenetics through human histone deacetylase PET imaging. <i>Science Translational Medicine</i> , 2016, 8, 351ra106.	5.8	83
248	Environmental enrichment preserved lifelong ocular dominance plasticity, but did not improve visual abilities. <i>Neurobiology of Aging</i> , 2016, 41, 130-137.	1.5	22
249	Affective dysfunction in a mouse model of Rett syndrome: Therapeutic effects of environmental stimulation and physical activity. <i>Developmental Neurobiology</i> , 2016, 76, 209-224.	1.5	22
250	Dendritic Spine Pathology in Neurodegenerative Diseases. <i>Annual Review of Pathology: Mechanisms of Disease</i> , 2016, 11, 221-250.	9.6	161
251	Hippocampus-dependent spatial memory impairment due to molar tooth loss is ameliorated by an enriched environment. <i>Archives of Oral Biology</i> , 2016, 61, 1-7.	0.8	37
252	Exposure to an enriched environment facilitates motor recovery and prevents short-term memory impairment and reduction of striatal BDNF in a progressive pharmacological model of parkinsonism in mice. <i>Behavioural Brain Research</i> , 2017, 328, 138-148.	1.2	25
253	Environmental Enrichment Repairs Structural and Functional Plasticity in the Hippocampus. , 2017, , 55-77.		1
254	Experiential learning in rodents: past experience enables rapid learning and localized encoding in hippocampus. <i>Learning and Memory</i> , 2017, 24, 569-579.	0.5	2
255	Decreased use of spatial pattern separation in contemporary lifestyles may contribute to hippocampal atrophy and diminish mental health. <i>Medical Hypotheses</i> , 2017, 107, 55-63.	0.8	3
256	Environmental enrichment protects spatial learning and hippocampal neurons from the long-lasting effects of protein malnutrition early in life. <i>Behavioural Brain Research</i> , 2017, 335, 55-62.	1.2	10
257	Aerobic exercise and a BDNF-mimetic therapy rescue learning and memory in a mouse model of Down syndrome. <i>Scientific Reports</i> , 2017, 7, 16825.	1.6	63
258	Molecular mechanisms of experience-dependent structural and functional plasticity in the brain. <i>Anatomical Science International</i> , 2017, 92, 1-17.	0.5	17

#	ARTICLE	IF	CITATIONS
259	Enriched environment improves behavioral performance and attenuates inflammatory response induced by TNF- $\alpha$ in healthy adult mice. <i>European Journal of Inflammation</i> , 2017, 15, 200-209.	0.2	8
260	Exercise Induced Neuroplasticity to Enhance Therapeutic Outcomes of Cognitive Remediation in Schizophrenia: Analyzing the Role of Brain-derived Neurotrophic Factor. <i>CNS and Neurological Disorders - Drug Targets</i> , 2017, 16, 638-651.	0.8	24
261	Psychological Environmental Enrichment of Animals in Research. , 2017, , 47-69.		1
262	Environmental Factors Promoting Neural Plasticity: Insights from Animal and Human Studies. <i>Neural Plasticity</i> , 2017, 2017, 1-10.	1.0	57
263	Improved penetration of wild ginseng extracts into the skin using low-temperature atmospheric pressure plasma. <i>Plasma Sources Science and Technology</i> , 2018, 27, 044001.	1.3	5
264	Repetitive Brain Injury of Juvenile Mice Impairs Environmental Enrichment-Induced Modulation of REM Sleep in Adulthood. <i>Neuroscience</i> , 2018, 375, 74-83.	1.1	9
265	5-HT2A Receptors and BDNF Regulation: Implications for Psychopathology. , 2018, , 395-438.		7
266	Neuronal RNA-binding protein HuD regulates addiction-related gene expression and behavior. <i>Genes, Brain and Behavior</i> , 2018, 17, e12454.	1.1	25
267	Exercise as a Positive Modulator of Brain Function. <i>Molecular Neurobiology</i> , 2018, 55, 3112-3130.	1.9	63
268	Short-Term Exposure to Enriched Environment in Adult Rats Restores MK-801-Induced Cognitive Deficits and GABAergic Interneuron Immunoreactivity Loss. <i>Molecular Neurobiology</i> , 2018, 55, 26-41.	1.9	24
269	Estrogen and Environmental Enrichment Differentially Affect Neurogenesis, Dendritic Spine Immunolabeling and Synaptogenesis in the Hippocampus of Young and Reproductively Senescent Female Rats. <i>Neuroendocrinology</i> , 2018, 106, 252-263.	1.2	19
270	Deleterious effects of prenatal exposure to morphine on the spatial learning and hippocampal BDNF and long-term potentiation in juvenile rats: Beneficial influences of postnatal treadmill exercise and enriched environment. <i>Neurobiology of Learning and Memory</i> , 2018, 147, 54-64.	1.0	40
271	Magnesium boosts the memory restorative effect of environmental enrichment in Alzheimer's disease mice. <i>CNS Neuroscience and Therapeutics</i> , 2018, 24, 70-79.	1.9	32
273	How Does an Enriched Environment Impact Hippocampus Brain Plasticity?. , 0, , .		3
274	Neurogenesis in adult brain. <i>Salud Uninorte</i> , 2018, 34, 144-159.	0.0	0
275	Lebensbedingungen haben einen starken Einfluss auf die Plastizität des Gehirns. <i>E-Neuroforum</i> , 2018, 24, 25-38.	0.2	0
276	Significant Acute Response of Brain-Derived Neurotrophic Factor Following a Session of Extreme Conditioning Program Is Correlated With Volume of Specific Exercise Training in Trained Men. <i>Frontiers in Physiology</i> , 2018, 9, 823.	1.3	8
277	Signaling Mechanisms of Selective PPAR $\gamma$ Modulators in Alzheimer's Disease. <i>PPAR Research</i> , 2018, 2018, 1-20.	1.1	48



#	ARTICLE	IF	CITATIONS
278	Adult Hippocampal Neurogenesis: A Coming-of-Age Story. <i>Journal of Neuroscience</i> , 2018, 38, 10401-10410.	1.7	134
279	iPlasticity: Induced juvenile-like plasticity in the adult brain as a mechanism of antidepressants. <i>Psychiatry and Clinical Neurosciences</i> , 2018, 72, 633-653.	1.0	50
280	Effects of combined pre- and post-natal enrichment on anxiety-like, social, and cognitive behaviours in juvenile and adult rat offspring. <i>Behavioural Brain Research</i> , 2018, 353, 40-50.	1.2	42
281	Assessment of Topographic Memory in Mice in a Complex Environment Using the Hamlet Test. <i>Current Protocols in Mouse Biology</i> , 2018, 8, e43.	1.2	5
282	Environmental conditions strongly affect brain plasticity. <i>E-Neuroforum</i> , 2018, 24, A19-A29.	0.2	4
283	Repeated maternal separation: Alcohol consumption, anxious behavior and corticosterone were reversed by a non-pharmacological treatment. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 95, 109726.	2.5	15
284	Short-term environmental enrichment, and not physical exercise, alleviate cognitive decline and anxiety from middle age onwards without affecting hippocampal gene expression. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2019, 19, 1143-1169.	1.0	17
285	Therapeutic effects of combination environmental enrichment with necrostatin-1 on cognition following vascular cognitive impairment in mice. <i>European Journal of Inflammation</i> , 2019, 17, 205873921983483.	0.2	5
286	Enriched environment alleviates stress-induced dry-eye through the BDNF axis. <i>Scientific Reports</i> , 2019, 9, 3422.	1.6	17
287	Neuroplastic and cognitive impairment in substance use disorders: a therapeutic potential of cognitive stimulation. <i>Neuroscience and Biobehavioral Reviews</i> , 2019, 106, 23-48.	2.9	44
288	Dendritic spines: Revisiting the physiological role. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 92, 161-193.	2.5	165
289	CoREST Complex-Selective Histone Deacetylase Inhibitors Show Prosynaptic Effects and an Improved Safety Profile To Enable Treatment of Synaptopathies. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1729-1743.	1.7	33
290	Enhancement of BDNF Expression and Memory by HDAC Inhibition Requires BET Bromodomain Reader Proteins. <i>Journal of Neuroscience</i> , 2019, 39, 612-626.	1.7	48
291	Environmental enrichment, alone or in combination with various pharmacotherapies, confers marked benefits after traumatic brain injury. <i>Neuropharmacology</i> , 2019, 145, 13-24.	2.0	28
292	Early exposure to environmental enrichment modulates the effects of prenatal ethanol exposure upon opioid gene expression and adolescent ethanol intake. <i>Neuropharmacology</i> , 2020, 165, 107917.	2.0	16
293	Therapeutic efficacy of environmental enrichment for substance use disorders. <i>Pharmacology Biochemistry and Behavior</i> , 2020, 188, 172829.	1.3	30
294	Environmental enrichment restores impaired spatial memory and synaptic plasticity in prenatally stress exposed rats: The role of GABAergic neurotransmission. <i>International Journal of Developmental Neuroscience</i> , 2020, 80, 573-585.	0.7	9
296	Neurobehavioral Effects of Restricted and Unpredictable Environmental Enrichment in Rats. <i>Frontiers in Pharmacology</i> , 2020, 11, 674.	1.6	22

#	ARTICLE	IF	CITATIONS
297	Therapeutic efficacy of environmental enrichment on behavioral, endocrine, and synaptic alterations in an animal model of maternal immune activation. <i>Brain, Behavior, &amp; Immunity - Health</i> , 2020, 3, 100043.	1.3	22
298	Transgenerational transmission of neurodevelopmental disorders induced by maternal exposure to PM2.5. <i>Chemosphere</i> , 2020, 255, 126920.	4.2	20
299	Environmental Stimulation Counteracts the Suppressive Effects of Maternal High-Fructose Diet on Cell Proliferation and Neuronal Differentiation in the Dentate Gyrus of Adult Female Offspring via Histone Deacetylase 4. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 3919.	1.2	7
300	Towards an understanding of the physical activity-BDNF-cognition triumvirate: A review of associations and dosage. <i>Ageing Research Reviews</i> , 2020, 60, 101044.	5.0	62
301	The role of CREB and BDNF in neurobiology and treatment of Alzheimer's disease. <i>Life Sciences</i> , 2020, 257, 118020.	2.0	198
302	Rats with prenatal dexamethasone exposure and postnatal high-fat diet exhibited insulin resistance, and spatial learning and memory impairment: effects of enriched environment. <i>NeuroReport</i> , 2020, 31, 265-273.	0.6	4
303	Effects of aging on the motor, cognitive and affective behaviors, neuroimmune responses and hippocampal gene expression. <i>Behavioural Brain Research</i> , 2020, 383, 112501.	1.2	18
304	Sex-Dependent Effects of Developmental Lead Exposure in Wistar Rats: Evidence from Behavioral and Molecular Correlates. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2664.	1.8	12
305	An in-silico approach: identification of PPAR- $\beta$ agonists from seaweeds for the management of Alzheimer's Disease. <i>Journal of Biomolecular Structure and Dynamics</i> , 2021, 39, 2210-2229.	2.0	12
306	Short-Term Environmental Enrichment is a Stronger Modulator of Brain Glial Cells and Cervical Lymph Node T Cell Subtypes than Exercise or Combined Exercise and Enrichment. <i>Cellular and Molecular Neurobiology</i> , 2021, 41, 469-486.	1.7	7
307	Design of Novel PPAR Agonist for Neurodegenerative Disease. , 2021, , 249-270.		0
308	Exposure of R6/2 mice in an enriched environment augments P42 therapy efficacy on Huntington's disease progression. <i>Neuropharmacology</i> , 2021, 186, 108467.	2.0	10
309	Central administration of afzelin extracted from <i>Ribes fasciculatum</i> improves cognitive and memory function in a mouse model of dementia. <i>Scientific Reports</i> , 2021, 11, 9182.	1.6	15
310	Evolution of stress responses refine mechanisms of social rank. <i>Neurobiology of Stress</i> , 2021, 14, 100328.	1.9	5
311	The effect of electronic cigarettes exposure on learning and memory functions: behavioral and molecular analysis. <i>Inhalation Toxicology</i> , 2021, 33, 1-10.	0.8	5
312	The influence of sensory experience on the glutamatergic synapse. <i>Neuropharmacology</i> , 2021, 193, 108620.	2.0	9
313	Awareness of maternal stress, consequences for the offspring and the need for early interventions to increase stress resilience. <i>Journal of Perinatal Medicine</i> , 2021, 49, 979-989.	0.6	3
314	Brief Environmental Enrichment exposure enhances contextual-induced sucrose-seeking with and without memory reactivation in rats. <i>Behavioural Brain Research</i> , 2022, 416, 113556.	1.2	4

#	ARTICLE	IF	CITATIONS
315	A Potential Role for the Hippocampus in the Expression of Kindling-Induced Fear. , 2005, , 285-294.		1
317	Amyloid-Beta, BDNF, and the Mechanism of Neurodegeneration in Alzheimer's Disease. , 2014, , 1597-1620.		2
318	Biological Roles of Neurotrophins. Handbook of Experimental Pharmacology, 1999, , 1-31.	0.9	7
319	Differential expression of immediate-early genes during synaptic plasticity, seizures and brain injury suggests specific functions for these molecules in brain neurons. , 1995, , 35-50.		4
320	Environment and early life: Decisive factors for stress-resilience and vulnerability. International Review of Neurobiology, 2020, 150, 155-185.	0.9	11
321	Postoperative Cognitive Dysfunction and the Protective Effects of Enriched Environment: A Systematic Review. Neurodegenerative Diseases, 2020, 20, 113-122.	0.8	12
322	Tachykinins and Tachykinin Receptor Antagonists in Depression: Therapeutic Implications. , 2011, , 350-357.		7
323	Genetic Overexpression of NR2B Subunit Enhances Social Recognition Memory for Different Strains and Species. PLoS ONE, 2012, 7, e36387.	1.1	35
324	Long-Term Effects of Enriched Environment on Neurofunctional Outcome and CNS Lesion Volume After Traumatic Brain Injury in Rats. Physiological Research, 2015, 64, 129-145.	0.4	10
325	Extreme conditioning session augments brain-derived neurotrophic factor in healthy novice participants: a pilot study. Sport Sciences for Health, 0, , 1.	0.4	0
326	Growth Hormone and Insulin-like Growth Factor-I and Their Effects on Astroglial Gap Junctions. , 2006, , 147-172.		1
327	Experience-Dependent Rewiring of Retinal Circuitry: Involvement of Immediate Early Genes. , 2006, , 79-95.		0
329	Molekulare Mechanismen der Depressionstherapie. , 1999, , 273-318.		4
330	BDNF Pretreatment Attenuates Morphine-Induced Learning and Memory Impairment in Rats. Caspian Journal of Neurological Sciences, 2015, 1, 12-18.	0.1	1
331	Effect of acupuncture on memory function in old rats. Journal of Korean Medicine, 2017, 38, 31-40.	0.1	0
333	Prophylactic activation of neuroprotective stress response pathways by dietary and behavioral manipulations. Neurotherapeutics, 2004, 1, 111-116.	2.1	0
335	Environmental Enrichment Prevents Methamphetamine-Induced Spatial Memory Deficits and Obsessive-Compulsive Behavior in Rats. Iranian Journal of Psychiatry, 2017, 12, 8-14.	0.4	10
337	Environmental enrichment sex-dependently rescues memory impairment in FABP5 KO mice not mediated by brain-derived neurotrophic factor. Behavioural Brain Research, 2022, 425, 113814.	1.2	5

#	ARTICLE	IF	CITATIONS
338	The improvement of <i>Coreopsis tinctoria</i> essential oil on learning and memory impairment of d-galactose-induced mice through Nrf2/NF- $\kappa$ B pathway. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	2
340	Heat shock factor <sc>HSF1</sc> regulates <sc>BDNF</sc> gene promoters upon acute stress in the hippocampus, together with <sc>pCREB</sc>. <i>Journal of Neurochemistry</i> , 2023, 165, 131-148.	2.1	2
341	Therapeutic effects of growth hormone in a rat model of total sleep deprivation: Evaluating behavioral, hormonal, biochemical, electrophysiological and oxidative stress markers. <i>Behavioural Brain Research</i> , 2022, , 114190.	1.2	4
342	Rearing in an Enriched Environment Ameliorates the ADHD-like Behaviors of Lister Hooded Rats While Suppressing Neuronal Activities in the Medial Prefrontal Cortex. <i>Cells</i> , 2022, 11, 3649.	1.8	2
344	Maternal separation increased memory function and anxiety without effects of environmental enrichment in male rats. <i>Behavioural Brain Research</i> , 2023, 441, 114280.	1.2	2
345	Melatonin Enhances Object Recognition Memory through Melatonin MT1 and MT2 Receptor-Mediated and Non-Receptor-Mediated Mechanisms in Male Mice. <i>Journal of Behavioral and Brain Science</i> , 2022, 12, 640-657.	0.2	2
346	Environmental Enrichment Promotes Transgenerational Programming of Uterine Inflammatory and Stress Markers Comparable to Gestational Chronic Variable Stress. <i>International Journal of Molecular Sciences</i> , 2023, 24, 3734.	1.8	2