Gerd Kempermann

List of Publications by Citations

215 papers	34,617 citations	86 h-index	185 g-index
299 ext. papers	38,211 ext. citations	8.2 avg, IF	7.46 L-index

#	Paper	IF	Citations
215	Running increases cell proliferation and neurogenesis in the adult mouse dentate gyrus. *Nature Neuroscience*, **1999**, 2, 266-70	25.5	2966
214	More hippocampal neurons in adult mice living in an enriched environment. *Nature*, **1997**, 386, 493-5	50.4	2863
213	Neural consequences of environmental enrichment. *Nature Reviews Neuroscience*, **2000**, 1, 191-8	13.5	1835
212	Milestones of neuronal development in the adult hippocampus. *Trends in Neurosciences*, **2004**, 27, 447-52	13.3	1115
211	Epidermal growth factor and fibroblast growth factor-2 have different effects on neural progenitors in the adult rat brain. *Journal of Neuroscience*, **1997**, 17, 5820-9	6.6	1064
210	Experience-induced neurogenesis in the senescent dentate gyrus. *Journal of Neuroscience*, **1998**, 18, 3206-12	6.6	930
209	The Collaborative Cross, a community resource for the genetic analysis of complex traits. *Nature Genetics*, **2004**, 36, 1133-7	36.3	822
208	Early determination and long-term persistence of adult-generated new neurons in the hippocampus of mice. *Development (Cambridge)*, **2003**, 130, 391-9	6.6	761
207	Neuroplasticity in old age: sustained fivefold induction of hippocampal neurogenesis by long-term environmental enrichment. *Annals of Neurology*, **2002**, 52, 135-43	9.4	703
206	Proliferation and differentiation of progenitor cells throughout the intact adult rat spinal cord. *Journal of Neuroscience*, **2000**, 20, 2218-28	6.6	662
205	Temporal and spatial dynamics of brain structure changes during extensive learning. *Journal of Neuroscience*, **2006**, 26, 6314-7	6.6	584
204	Enriched environment and physical activity stimulate hippocampal but not olfactory bulb neurogenesis. *European Journal of Neuroscience*, **2003**, 17, 2042-6	3.5	582
203	Multipotent progenitor cells in the adult dentate gyrus. *Journal of Neurobiology*, **1998**, 36, 249-66		555
202	Genetic influence on neurogenesis in the dentate gyrus of adult mice. *Proceedings of the National Academy of Sciences of the United States of America*, **1997**, 94, 10409-14	11.5	517
201	Quiescent and active hippocampal neural stem cells with distinct morphologies respond selectively to physiological and pathological stimuli and aging. *Cell Stem Cell*, **2010**, 6, 445-56	18	516
200	Subpopulations of proliferating cells of the adult hippocampus respond differently to physiologic neurogenic stimuli. *Journal of Comparative Neurology*, **2003**, 467, 455-63	3.4	516
199	Functional significance of adult neurogenesis. *Current Opinion in Neurobiology*, **2004**, 14, 186-91	7.6	509

198	Neurogenesis in the Adult Hippocampus. *Cold Spring Harbor Perspectives in Biology*, **2015**, 7, a018812	10.2	475
197	Murine features of neurogenesis in the human hippocampus across the lifespan from 0 to 100 years. *PLoS ONE*, **2010**, 5, e8809	3.7	451
196	Adult-generated hippocampal neurons allow the flexible use of spatially precise learning strategies. *PLoS ONE*, **2009**, 4, e5464	3.7	432
195	Why new neurons? Possible functions for adult hippocampal neurogenesis. *Journal of Neuroscience*, **2002**, 22, 635-8	6.6	398
194	Human Adult Neurogenesis: Evidence and Remaining Questions. *Cell Stem Cell*, **2018**, 23, 25-30	18	394
193	Transient calretinin expression defines early postmitotic step of neuronal differentiation in adult hippocampal neurogenesis of mice. *Molecular and Cellular Neurosciences*, **2003**, 24, 603-13	4.8	384
192	Subpopulation of nestin-expressing progenitor cells in the adult murine hippocampus shows electrophysiological and morphological characteristics of astrocytes. *Molecular and Cellular Neurosciences*, **2003**, 23, 373-82	4.8	375
191	Whitepaper: Defining and investigating cognitive reserve, brain reserve, and brain maintenance. *Alzheimeris and Dementia*, **2020**, 16, 1305-1311	1.2	365
190	Physical exercise prevents age-related decline in precursor cell activity in the mouse dentate gyrus. *Neurobiology of Aging*, **2006**, 27, 1505-13	5.6	338
189	The nature and identification of quantitative trait loci: a communitys view. *Nature Reviews Genetics* , **2003**, 4, 911-6	30.1	330
188	Adult neurogenesis and repair of the adult CNS with neural progenitors, precursors, and stem cells. *Progress in Neurobiology*, **2005**, 75, 321-41	10.9	326
187	Environmental stimulation of 129/SvJ mice causes increased cell proliferation and neurogenesis in the adult dentate gyrus. *Current Biology*, **1998**, 8, 939-42	6.3	317
186	Depressed new neurons--adult hippocampal neurogenesis and a cellular plasticity hypothesis of major depression. *Biological Psychiatry*, **2003**, 54, 499-503	7.9	314
185	Emergence of individuality in genetically identical mice. *Science*, **2013**, 340, 756-9	33.3	301
184	The neurogenic reserve hypothesis: what is adult hippocampal neurogenesis good for?. *Trends in Neurosciences*, **2008**, 31, 163-9	13.3	292
183	An essential role for retinoid receptors RARbeta and RXRgamma in long-term potentiation and depression. *Neuron*, **1998**, 21, 1353-61	13.9	280
182	Type-2 cells as link between glial and neuronal lineage in adult hippocampal neurogenesis. *Glia*, **2006**, 54, 805-14	9	268
181	Variability of doublecortin-associated dendrite maturation in adult hippocampal neurogenesis is independent of the regulation of precursor cell proliferation. *BMC Neuroscience*, **2006**, 7, 77	3.2	261

180	Intermediate progenitors in adult hippocampal neurogenesis: Tbr2 expression and coordinate regulation of neuronal output. *Journal of Neuroscience*, **2008**, 28, 3707-17	6.6	255
179	Adult-born hippocampal neurons mature into activity-dependent responsiveness. *European Journal of Neuroscience*, **2003**, 18, 2707-12	3.5	251
178	Differential regulation of gliogenesis in the context of adult hippocampal neurogenesis in mice. *Glia*, **2004**, 46, 41-52	9	248
177	Cognitive and physical activity differently modulate disease progression in the amyloid precursor protein (APP)-23 model of Alzheimer's disease. *Biological Psychiatry*, **2006**, 60, 1314-23	7.9	246
176	Additive effects of physical exercise and environmental enrichment on adult hippocampal neurogenesis in mice. *Frontiers in Neuroscience*, **2009**, 3, 50	5.1	235
175	Regional effects of wheel running and environmental enrichment on cell genesis and microglia proliferation in the adult murine neocortex. *Cerebral Cortex*, **2003**, 13, 845-51	5.1	229
174	Seizures induce proliferation and dispersion of doublecortin-positive hippocampal progenitor cells. *Experimental Neurology*, **2005**, 196, 342-51	5.7	227
173	CD4-positive T lymphocytes provide a neuroimmunological link in the control of adult hippocampal neurogenesis. *Journal of Immunology*, **2009**, 182, 3979-84	5.3	225
172	A functional hypothesis for adult hippocampal neurogenesis: avoidance of catastrophic interference in the dentate gyrus. *Hippocampus*, **2006**, 16, 329-43	3.5	225
171	Neogenesis of cerebellar Purkinje neurons from gene-marked bone marrow cells in vivo. *Journal of Cell Biology*, **2001**, 155, 733-8	7.3	221
170	Genetic determinants of adult hippocampal neurogenesis correlate with acquisition, but not probe trial performance, in the water maze task. *European Journal of Neuroscience*, **2002**, 16, 129-36	3.5	220
169	Why and how physical activity promotes experience-induced brain plasticity. *Frontiers in Neuroscience*, **2010**, 4, 189	5.1	199
168	New neurons for 'survival of the fittest' *Nature Reviews Neuroscience*, **2012**, 13, 727-36	13.5	189
167	Adult hippocampal neurogenesis and voluntary running activity: circadian and dose-dependent effects. *Journal of Neuroscience Research*, **2004**, 76, 216-22	4.4	189
166	The contribution of failing adult hippocampal neurogenesis to psychiatric disorders. *Current Opinion in Psychiatry*, **2008**, 21, 290-5	4.9	183
165	Glioblastoma-induced attraction of endogenous neural precursor cells is associated with improved survival. *Journal of Neuroscience*, **2005**, 25, 2637-46	6.6	182
164	Experience-dependent regulation of adult hippocampal neurogenesis: effects of long-term stimulation and stimulus withdrawal. *Hippocampus*, **1999**, 9, 321-32	3.5	181
163	Neurogenesis in the adult hippocampus. *Cell and Tissue Research*, **2008**, 331, 243-50	4.2	179

162	Physical activity and the regulation of neurogenesis in the adult and aging brain. *NeuroMolecular Medicine*, **2008**, 10, 59-66	4.6	178
161	Melatonin modulates cell survival of new neurons in the hippocampus of adult mice. *Neuropsychopharmacology*, **2009**, 34, 2180-91	8.7	174
160	Regulation of adult hippocampal neurogenesis - implications for novel theories of major depression. *Bipolar Disorders*, **2002**, 4, 17-33	3.8	174
159	Age-dependent expression of glucocorticoid- and mineralocorticoid receptors on neural precursor cell populations in the adult murine hippocampus. *Aging Cell*, **2004**, 3, 363-71	9.9	172
158	Natural variation and genetic covariance in adult hippocampal neurogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 780-5	11.5	165
157	New nerve cells for the adult brain. *Scientific American*, **1999**, 280, 48-53	0.5	163
156	Activity-dependent regulation of neuronal plasticity and self repair. *Progress in Brain Research*, **2000**, 127, 35-48	2.9	152
155	Age effects on the regulation of adult hippocampal neurogenesis by physical activity and environmental enrichment in the APP23 mouse model of Alzheimer disease. *Hippocampus*, **2009**, 19, 1008-18	3.5	150
154	A subpopulation of precursor cells in the mouse dentate gyrus receives synaptic GABAergic input. *Molecular and Cellular Neurosciences*, **2005**, 29, 181-9	4.8	145
153	Serotonin is required for exercise-induced adult hippocampal neurogenesis. *Journal of Neuroscience* , **2013**, 33, 8270-5	6.6	143
152	Mice in an enriched environment learn more flexibly because of adult hippocampal neurogenesis. *Hippocampus*, **2016**, 26, 261-71	3.5	140
151	Genetic influence on phenotypic differentiation in adult hippocampal neurogenesis. *Developmental Brain Research*, **2002**, 134, 1-12		136
150	An old test for new neurons: refining the Morris water maze to study the functional relevance of adult hippocampal neurogenesis. *Frontiers in Neuroscience*, **2013**, 7, 63	5.1	133
149	Glial cells in adult neurogenesis. *Glia*, **2012**, 60, 159-74	9	130
148	Genetic approaches to neurotrauma research: opportunities and potential pitfalls of murine models. *Experimental Neurology*, **1999**, 157, 19-42	5.7	130
147	Environmental enrichment, new neurons and the neurobiology of individuality. *Nature Reviews Neuroscience*, **2019**, 20, 235-245	13.5	129
146	Cannabinoid receptor CB1 mediates baseline and activity-induced survival of new neurons in adult hippocampal neurogenesis. *Cell Communication and Signaling*, **2010**, 8, 12	7.5	128
145	Differential 24 h responsiveness of Prox1-expressing precursor cells in adult hippocampal neurogenesis to physical activity, environmental enrichment, and kainic acid-induced seizures. *Neuroscience*, **2008**, 154, 521-9	3.9	124

144	Enriched monolayer precursor cell cultures from micro-dissected adult mouse dentate gyrus yield functional granule cell-like neurons. *PLoS ONE*, **2007**, 2, e388	3.7	119
143	Neuroscience. Microglia: the enemy within?. *Science*, **2003**, 302, 1689-90	33.3	117
142	LRP2 in ependymal cells regulates BMP signaling in the adult neurogenic niche. *Journal of Cell Science*, **2010**, 123, 1922-30	5.3	108
141	Adult hippocampal neurogenesis and aging. *European Archives of Psychiatry and Clinical Neuroscience*, **2007**, 257, 271-80	5.1	105
140	Cdk5 regulates accurate maturation of newborn granule cells in the adult hippocampus. *PLoS Biology*, **2008**, 6, e272	9.7	103
139	Enriched environment induces cellular plasticity in the adult substantia nigra and improves motor behavior function in the 6-OHDA rat model of Parkinson's disease. *Experimental Neurology*, **2006**, 199, 291-300	5.7	101
138	Neurogenesis in the Adult Hippocampus. *Novartis Foundation Symposium*, **2008**, 220-241		96
137	Properties of doublecortin-(DCX)-expressing cells in the piriform cortex compared to the neurogenic dentate gyrus of adult mice. *PLoS ONE*, **2011**, 6, e25760	3.7	95
136	Chronic treatment with melatonin stimulates dendrite maturation and complexity in adult hippocampal neurogenesis of mice. *Journal of Pineal Research*, **2011**, 50, 29-37	10.4	95
135	A protocol for isolation and enriched monolayer cultivation of neural precursor cells from mouse dentate gyrus. *Frontiers in Neuroscience*, **2011**, 5, 89	5.1	93
134	Development of the adult neurogenic niche in the hippocampus of mice. *Frontiers in Neuroanatomy*, **2015**, 9, 53	3.6	92
133	Running in pregnancy transiently increases postnatal hippocampal neurogenesis in the offspring. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 3852-7	11.5	92
132	Seven principles in the regulation of adult neurogenesis. *European Journal of Neuroscience*, **2011**, 33, 1018-24	3.5	90
131	Physical exercise increases adult neurogenesis and telomerase activity, and improves behavioral deficits in a mouse model of schizophrenia. *Brain, Behavior, and Immunity*, **2011**, 25, 971-80	16.6	89
130	Paradoxical effects of learning the Morris water maze on adult hippocampal neurogenesis in mice may be explained by a combination of stress and physical activity. *Genes, Brain and Behavior*, **2006**, 5, 29-39	3.6	87
129	Enriched environment and physical activity reduce microglia and influence the fate of NG2 cells in the amygdala of adult mice. *Cell and Tissue Research*, **2011**, 345, 69-86	4.2	80
128	Sortilin-related receptor with A-type repeats (SORLA) affects the amyloid precursor protein-dependent stimulation of ERK signaling and adult neurogenesis. *Journal of Biological Chemistry*, **2008**, 283, 14826-34	5.4	80
127	One mouse, two cultures: isolation and culture of adult neural stem cells from the two neurogenic zones of individual mice. *Journal of Visualized Experiments*, **2014**, e51225	1.6	76

126	Physical exercise increases Notch activity, proliferation and cell cycle exit of type-3 progenitor cells in adult hippocampal neurogenesis. *European Journal of Neuroscience*, **2010**, 32, 1256-64	3.5	75
125	New neurons in the adult mammalian brain: synaptogenesis and functional integration. *Journal of Neuroscience*, **2005**, 25, 10366-8	6.6	75
124	Adult neurogenesis and neurodegenerative disease. *Regenerative Medicine*, **2006**, 1, 15-28	2.5	69
123	Folate deficiency induces neurodegeneration and brain dysfunction in mice lacking uracil DNA glycosylase. *Journal of Neuroscience*, **2008**, 28, 7219-30	6.6	68
122	Activity Dependency and Aging in the Regulation of Adult Neurogenesis. *Cold Spring Harbor Perspectives in Biology*, **2015**, 7,	10.2	66
121	Green tea compound epigallo-catechin-3-gallate (EGCG) increases neuronal survival in adult hippocampal neurogenesis in vivo and in vitro. *Neuroscience*, **2016**, 322, 208-20	3.9	64
120	Changes in fitness are associated with changes in hippocampal microstructure and hippocampal volume among older adults. *NeuroImage*, **2016**, 131, 155-61	7.9	62
119	Endolymphatic sac tumours. *Histopathology*, **1998**, 33, 2-10	7.3	61
118	Genetics of the hippocampal transcriptome in mouse: a systematic survey and online neurogenomics resource. *Frontiers in Neuroscience*, **2009**, 3, 55	5.1	58
117	Adaptive peripheral immune response increases proliferation of neural precursor cells in the adult hippocampus. *FASEB Journal*, **2009**, 23, 3121-8	0.9	58
116	Not all water mazes are created equal: cyclin D2 knockout mice with constitutively suppressed adult hippocampal neurogenesis do show specific spatial learning deficits. *Genes, Brain and Behavior*, **2014**, 13, 357-64	3.6	55
115	Prominin-1 allows prospective isolation of neural stem cells from the adult murine hippocampus. *Journal of Neuroscience*, **2013**, 33, 3010-24	6.6	51
114	Oppositional effects of serotonin receptors 5-HT1a, 2, and 2c in the regulation of adult hippocampal neurogenesis. *Frontiers in Molecular Neuroscience*, **2010**, 3,	6.1	51
113	Lysophosphatidic Acid Receptor Is a Functional Marker of Adult Hippocampal Precursor Cells. *Stem Cell Reports*, **2016**, 6, 552-565	8	48
112	Increasing neurogenesis refines hippocampal activity rejuvenating navigational learning strategies and contextual memory throughout life. *Nature Communications*, **2020**, 11, 135	17.4	47
111	Translational research on reserve against neurodegenerative disease: consensus report of the International Conference on Cognitive Reserve in the Dementias and the Alzheimer's Association Reserve, Resilience and Protective Factors Professional Interest Area working groups. *BMC Medicine*, **2019**, 17, 47	11.4	43
110	The antitumorigenic response of neural precursors depends on subventricular proliferation and age. *Stem Cells*, **2008**, 26, 2945-54	5.8	43
109	Synaptic Network Activity Induces Neuronal Differentiation of Adult Hippocampal Precursor Cells through BDNF Signaling. *Frontiers in Neuroscience*, **2009**, 3, 49	5.1	42

108	Nestin-expressing cells divide and adopt a complex electrophysiologic phenotype after transient brain ischemia. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, 1613-24	7.3	41
107	Proliferative response of distinct hippocampal progenitor cell populations after cortical infarcts in the adult brain. *Neurobiology of Disease*, **2006**, 21, 324-32	7.5	39
106	NMDA and benzodiazepine receptors have synergistic and antagonistic effects on precursor cells in adult hippocampal neurogenesis. *European Journal of Neuroscience*, **2009**, 29, 244-52	3.5	37
105	Adult Neurogenesis82-108		36
104	Synergic Functions of miRNAs Determine Neuronal Fate of Adult Neural Stem Cells. *Stem Cell Reports*, **2017**, 8, 1046-1061	8	35
103	Association between exploratory activity and social individuality in genetically identical mice living in the same enriched environment. *Neuroscience*, **2015**, 309, 140-52	3.9	35
102	Resveratrol Enhances Neuroplastic Changes, Including Hippocampal Neurogenesis, and Memory in Balb/C Mice at Six Months of Age. *PLoS ONE*, **2015**, 10, e0145687	3.7	34
101	Adult hippocampal neurogenesis and plasticity in the infrapyramidal bundle of the mossy fiber projection: I. Co-regulation by activity. *Frontiers in Neuroscience*, **2011**, 5, 107	5.1	34
100	Exercise-Induced Activated Platelets Increase Adult Hippocampal Precursor Proliferation and Promote Neuronal Differentiation. *Stem Cell Reports*, **2019**, 12, 667-679	8	33
99	Adult Neurogenesis: An Evolutionary Perspective. *Cold Spring Harbor Perspectives in Biology*, **2015**, 8, a018986	10.2	33
98	The mammalian adult neurogenesis gene ontology (MANGO) provides a structural framework for published information on genes regulating adult hippocampal neurogenesis. *PLoS ONE*, **2012**, 7, e48527	3.7	33
97	Tis21 expression marks not only populations of neurogenic precursor cells but also new postmitotic neurons in adult hippocampal neurogenesis. *Cerebral Cortex*, **2010**, 20, 304-14	5.1	33
96	Role of endogenous neural stem cells in neurological disease and brain repair. *Advances in Experimental Medicine and Biology*, **2006**, 557, 191-220	3.6	33
95	The role of additive neurogenesis and synaptic plasticity in a hippocampal memory model with grid-cell like input. *PLoS Computational Biology*, **2011**, 7, e1001063	5	32
94	Preweaning enrichment has no lasting effects on adult hippocampal neurogenesis in four-month-old mice. *Genes, Brain and Behavior*, **2002**, 1, 46-54	3.6	31
93	Is silence golden? Effects of auditory stimuli and their absence on adult hippocampal neurogenesis. *Brain Structure and Function*, **2015**, 220, 1221-8	4	30
92	FASN-Dependent Lipid Metabolism Links Neurogenic Stem/Progenitor Cell Activity to Learning and Memory Deficits. *Cell Stem Cell*, **2020**, 27, 98-109.e11	18	30
91	Two genetic rat models of arterial hypertension show different mechanisms by which adult hippocampal neurogenesis is increased. *Developmental Neuroscience*, **2007**, 29, 124-33	2.2	30

90	Acute effects of wheel running on adult hippocampal precursor cells in mice are not caused by changes in cell cycle length or S phase length. *Frontiers in Neuroscience*, **2014**, 8, 314	5.1	28
89	The pessimistS and optimistS views of adult neurogenesis. *Cell*, **2011**, 145, 1009-11	56.2	28
88	Cytochrome P450 in rat astrocytes in vivo and in vitro: intracellular localization and induction by phenytoin. *Journal of Neuroscience Research*, **1994**, 39, 576-88	4.4	28
87	Different Mechanisms Must Be Considered to Explain the Increase in Hippocampal Neural Precursor Cell Proliferation by Physical Activity. *Frontiers in Neuroscience*, **2016**, 10, 362	5.1	28
86	Limits to human neurogenesis-really?. *Molecular Psychiatry*, **2020**, 25, 2207-2209	15.1	28
85	Delayed and transient increase of adult hippocampal neurogenesis by physical exercise in DBA/2 mice. *PLoS ONE*, **2013**, 8, e83797	3.7	26
84	Selective targeting of adenoviral vectors to neural precursor cells in the hippocampus of adult mice: new prospects for in situ gene therapy. *Stem Cells*, **2007**, 25, 2910-8	5.8	26
83	A co-culture model of the hippocampal neurogenic niche reveals differential effects of astrocytes, endothelial cells and pericytes on proliferation and differentiation of adult murine precursor cells. *Stem Cell Research*, **2015**, 15, 514-521	1.6	24
82	Systems genetics identifies Hp1bp3 as a novel modulator of cognitive aging. *Neurobiology of Aging*, **2016**, 46, 58-67	5.6	24
81	Selective increases in inter-individual variability in response to environmental enrichment in female mice. *ELife*, **2018**, 7,	8.9	24
80	Limited effects of an eIF2B51A allele on neurological impairments in the 5xFAD mouse model of AlzheimerS disease. *Neural Plasticity*, **2015**, 2015, 825157	3.3	23
79	Local origin and activity-dependent generation of nestin-expressing protoplasmic astrocytes in CA1. *Brain Structure and Function*, **2007**, 212, 19-35	4	23
78	MiR-135a-5p Is Critical for Exercise-Induced Adult Neurogenesis. *Stem Cell Reports*, **2019**, 12, 1298-1312	8	22
77	Photopatterning of multifunctional hydrogels to direct adult neural precursor cells. *Advanced Healthcare Materials*, **2015**, 4, 516-21	10.1	21
76	They are not too excited: the possible role of adult-born neurons in epilepsy. *Neuron*, **2006**, 52, 935-7	13.9	20
75	ROS Dynamics Delineate Functional States of Hippocampal Neural Stem Cells and Link to Their Activity-Dependent Exit from Quiescence. *Cell Stem Cell*, **2021**, 28, 300-314.e6	18	20
74	Mouse model of CADASIL reveals novel insights into Notch3 function in adult hippocampal neurogenesis. *Neurobiology of Disease*, **2015**, 75, 131-41	7.5	19
73	Mechanisms underlying resilience in ageing. *Nature Reviews Neuroscience*, **2019**, 20, 246	13.5	19

72	Cognitive Reserve in Model Systems for Mechanistic Discovery: The Importance of Longitudinal Studies. *Frontiers in Aging Neuroscience*, **2020**, 12, 607685	5.3	19
71	Myelin-specific T helper 17 cells promote adult hippocampal neurogenesis through indirect mechanisms. *F1000Research*, **2014**, 3, 169	3.6	18
70	The crystallin domain of small heat shock protein b8 (Hspb8) acts as survival and differentiation factor in adult hippocampal neurogenesis. *Journal of Neuroscience*, **2013**, 33, 5785-96	6.6	17
69	A Common Language: How Neuroimmunological Cross Talk Regulates Adult Hippocampal Neurogenesis. *Stem Cells International*, **2016**, 2016, 1681590	5	17
68	Mild brain ischemia induces unique physiological properties in striatal astrocytes. *Glia*, **2008**, 56, 925-34	9	16
67	Physical Exercise and Spatial Training: A Longitudinal Study of Effects on Cognition, Growth Factors, and Hippocampal Plasticity. *Scientific Reports*, **2018**, 8, 4239	4.9	14
66	Early-life environmental enrichment generates persistent individualized behavior in mice. *Science Advances*, **2020**, 6, eabb1478	14.3	14
65	Macroporous heparin-based microcarriers allow long-term 3D culture and differentiation of neural precursor cells. *Biomaterials*, **2020**, 230, 119540	15.6	14
64	as Reference Framework to Facilitate Insight and Decision-Making in Complex Contexts of Biomedical Research. *Frontiers in Neuroscience*, **2017**, 11, 634	5.1	13
63	Myelin-specific T helper 17 cells promote adult hippocampal neurogenesis through indirect mechanisms. *F1000Research*, **2014**, 3, 169	3.6	13
62	Adult Hippocampal Neurogenesis and Plasticity in the Infrapyramidal Bundle of the Mossy Fiber Projection: II. Genetic Covariation and Identification of Nos1 as Linking Candidate Gene. *Frontiers in Neuroscience*, **2011**, 5, 106	5.1	13
61	Adult Neurogenesis 2 **2012**,		12
60	Long-term in vivo imaging reveals tumor-specific dissemination and captures host tumor interaction in zebrafish xenografts. *Scientific Reports*, **2020**, 10, 13254	4.9	11
59	Impaired adult hippocampal neurogenesis in a mouse model of familial hypercholesterolemia: A role for the LDL receptor and cholesterol metabolism in adult neural precursor cells. *Molecular Metabolism*, **2019**, 30, 1-15	8.8	10
58	Optimizing brain performance: Identifying mechanisms of adaptive neurobiological plasticity. *Neuroscience and Biobehavioral Reviews*, **2019**, 105, 60-71	9	10
57	Off the beaten track: new neurons in the adult human striatum. *Cell*, **2014**, 156, 870-1	56.2	10
56	Noisy galvanic vestibular stimulation modulates spatial memory in young healthy adults. *Scientific Reports*, **2019**, 9, 9310	4.9	9
55	p27kip1 Is Required for Functionally Relevant Adult Hippocampal Neurogenesis in Mice. *Stem Cells*, **2017**, 35, 787-799	5.8	9

54	Phenytoin inhibits expression of microtubule-associated protein 2 and influences cell-viability and neurite growth of cultured cerebellar granule cells. *Brain Research*, **1995**, 687, 194-8	3.7	9
53	Selenium mediates exercise-induced adult neurogenesis and reverses learning deficits induced by hippocampal injury and aging.. *Cell Metabolism*, **2022**,	24.6	9
52	Integrative analysis of low- and high-resolution eQTL. *PLoS ONE*, **2010**, 5, e13920	3.7	9
51	Isolation, Culture and Differentiation of Adult Hippocampal Precursor Cells. *Bio-protocol*, **2017**, 7, e2603	0.9	9
50	Extracorporeal apheresis therapy for Alzheimer disease-targeting lipids, stress, and inflammation. *Molecular Psychiatry*, **2020**, 25, 275-282	15.1	9
49	Astrocytes, Makers of New Neurons. *Neuron*, **2015**, 88, 850-851	13.9	8
48	Static and dynamic 3D culture of neural precursor cells on macroporous cryogel microcarriers. *MethodsX*, **2020**, 7, 100805	1.9	7
47	Only watching others making their experiences is insufficient to enhance adult neurogenesis and water maze performance in mice. *Scientific Reports*, **2015**, 5, 14141	4.9	7
46	Neuroscience. Youth culture in the adult brain. *Science*, **2012**, 335, 1175-6	33.3	7
45	Transcription factor Runx1 is pro-neurogenic in adult hippocampal precursor cells. *PLoS ONE*, **2018**, 13, e0190789	3.7	7
44	Systems Genetics Analysis of a Recombinant Inbred Mouse Cell Culture Panel Reveals Wnt Pathway Member Lrp6 as a Regulator of Adult Hippocampal Precursor Cell Proliferation. *Stem Cells*, **2016**, 34, 674-84	5.8	7
43	Environmental enrichment preserves a young DNA methylation landscape in the aged mouse hippocampus. *Nature Communications*, **2021**, 12, 3892	17.4	6
42	Apple Peel and Flesh Contain Pro-neurogenic Compounds. *Stem Cell Reports*, **2021**, 16, 548-565	8	6
41	T Lymphocytes Contribute to the Control of Baseline Neural Precursor Cell Proliferation but Not the Exercise-Induced Up-Regulation of Adult Hippocampal Neurogenesis. *Frontiers in Immunology*, **2018**, 9, 2856	8.4	6
40	Neuroscience. What the bomb said about the brain. *Science*, **2013**, 340, 1180-1	33.3	5
39	Mast cells increase adult neural precursor proliferation and differentiation but this potential is not realized in vivo under physiological conditions. *Scientific Reports*, **2017**, 7, 17859	4.9	5
38	L-lactate exerts a pro-proliferative effect on adult hippocampal precursor cells. *IScience*, **2021**, 24, 102126	6.1	5
37	Defined Geldrop Cultures Maintain Neural Precursor Cells. *Scientific Reports*, **2018**, 8, 8433	4.9	5

36	Adult Neurogenesis **2013**, 161-178		4
35	Neurodegenerative Erkrankungen und zellulre Plastizitals sportmedizinische Herausforderung. *Deutsche Zeitschrift Fur Sportmedizin*, **2015**, 2015, 31-35	3.3	4
34	Rtrack: a software package for reproducible automated water maze analysis		4
33	What Is Adult Hippocampal Neurogenesis Good for?. *Frontiers in Neuroscience*, **2022**, 16, 852680	5.1	4
32	Activity-Based Maintenance of Adult Hippocampal Neurogenesis: Maintaining a Potential for Lifelong Plasticity. *Pancreatic Islet Biology*, **2015**, 119-123	0.4	3
31	What is the Functional Role of New Neurons in the Adult Dentate Gyrus?. *Research and Perspectives in Neurosciences*, **2004**, 57-65		3
30	Continuous high-resolution in vivo imaging reveals tumor-specific dissemination in an embryonic zebrafish xenograft model		3
29	Adult-born neurons promote cognitive flexibility by improving memory precision and indexing. *Hippocampus*, **2021**, 31, 1068-1079	3.5	3
28	The Small World of Adult Hippocampal Neurogenesis. *Frontiers in Neuroscience*, **2018**, 12, 641	5.1	3
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