Fred H Gage

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2844361/publications.pdf

Version: 2024-02-01

356 329 91,551 291 136 citations h-index papers

g-index 321 321 321 63081 docs citations times ranked citing authors all docs

287

#	Article	IF	CITATIONS
1	Neurogenesis in the adult human hippocampus. Nature Medicine, 1998, 4, 1313-1317.	30.7	5,606
2	Running increases cell proliferation and neurogenesis in the adult mouse dentate gyrus. Nature Neuroscience, 1999, 2, 266-270.	14.8	3,370
3	More hippocampal neurons in adult mice living in an enriched environment. Nature, 1997, 386, 493-495.	27.8	3,215
4	Mechanisms Underlying Inflammation in Neurodegeneration. Cell, 2010, 140, 918-934.	28.9	2,860
5	Mechanisms and Functional Implications of Adult Neurogenesis. Cell, 2008, 132, 645-660.	28.9	2,678
6	Functional neurogenesis in the adult hippocampus. Nature, 2002, 415, 1030-1034.	27.8	2,558
7	Neural consequences of enviromental enrichment. Nature Reviews Neuroscience, 2000, 1, 191-198.	10.2	2,147
8	Exercise Enhances Learning and Hippocampal Neurogenesis in Aged Mice. Journal of Neuroscience, 2005, 25, 8680-8685.	3.6	1,796
9	New neurons and new memories: how does adult hippocampal neurogenesis affect learning and memory?. Nature Reviews Neuroscience, 2010, 11, 339-350.	10.2	1,766
10	Vascular niche for adult hippocampal neurogenesis. Journal of Comparative Neurology, 2000, 425, 479-494.	1.6	1,700
11	Wnt signalling regulates adult hippocampal neurogenesis. Nature, 2005, 437, 1370-1375.	27.8	1,363
12	Astroglia induce neurogenesis from adult neural stem cells. Nature, 2002, 417, 39-44.	27.8	1,342
13	Modelling schizophrenia using human induced pluripotent stem cells. Nature, 2011, 473, 221-225.	27.8	1,206
14	A Model for Neural Development and Treatment of Rett Syndrome Using Human Induced Pluripotent Stem Cells. Cell, 2010, 143, 527-539.	28.9	1,175
15	Distinct Morphological Stages of Dentate Granule Neuron Maturation in the Adult Mouse Hippocampus. Journal of Neuroscience, 2006, 26, 3-11.	3.6	1,073
16	Probing sporadic and familial Alzheimer's disease using induced pluripotent stem cells. Nature, 2012, 482, 216-220.	27.8	1,069
17	Experience-Induced Neurogenesis in the Senescent Dentate Gyrus. Journal of Neuroscience, 1998, 18, 3206-3212.	3.6	1,011
18	The Adult Rat Hippocampus Contains Primordial Neural Stem Cells. Molecular and Cellular Neurosciences, 1997, 8, 389-404.	2.2	1,005

#	Article	IF	CITATIONS
19	An environment-dependent transcriptional network specifies human microglia identity. Science, 2017, 356, .	12.6	911
20	Human embryonic stem cells express an immunogenic nonhuman sialic acid. Nature Medicine, 2005, 11, 228-232.	30.7	884
21	Somatic mosaicism in neuronal precursor cells mediated by L1 retrotransposition. Nature, 2005, 435, 903-910.	27.8	860
22	Adult Neurogenesis in the Hippocampus: From Stem Cells to Behavior. Cell, 2016, 167, 897-914.	28.9	850
23	Fibroblast Growth Factor-2 Activates a Latent Neurogenic Program in Neural Stem Cells from Diverse Regions of the Adult CNS. Journal of Neuroscience, 1999, 19, 8487-8497.	3.6	844
24	Early determination and long-term persistence of adult-generated new neurons in the hippocampus of mice. Development (Cambridge), 2003, 130, 391-399.	2.5	841
25	An in vivo model of functional and vascularized human brain organoids. Nature Biotechnology, 2018, 36, 432-441.	17.5	826
26	Adult hippocampal neurogenesis and its role in Alzheimer's disease. Molecular Neurodegeneration, 2011, 6, 85.	10.8	820
27	A Nurr1/CoREST Pathway in Microglia and Astrocytes Protects Dopaminergic Neurons from Inflammation-Induced Death. Cell, 2009, 137, 47-59.	28.9	811
28	Neuroplasticity in old age: Sustained fivefold induction of hippocampal neurogenesis by longâ€ŧerm environmental enrichment. Annals of Neurology, 2002, 52, 135-143.	5.3	796
29	Regenerating the damaged central nervous system. Nature, 2000, 407, 963-970.	27.8	777
30	L1 retrotransposition in human neural progenitor cells. Nature, 2009, 460, 1127-1131.	27.8	750
31	In Vivo Fate Analysis Reveals the Multipotent and Self-Renewal Capacities of Sox2+ Neural Stem Cells in the Adult Hippocampus. Cell Stem Cell, 2007, 1, 515-528.	11.1	717
32	Neurogenesis in the Adult Hippocampus. Cold Spring Harbor Perspectives in Biology, 2015, 7, a018812.	5.5	676
33	Adult Spinal Cord Stem Cells Generate Neurons after Transplantation in the Adult Dentate Gyrus. Journal of Neuroscience, 2000, 20, 8727-8735.	3.6	670
34	Neurogenesis in the Adult Brain. Journal of Neuroscience, 2002, 22, 612-613.	3.6	661
35	Histone deacetylase inhibition-mediated neuronal differentiation of multipotent adult neural progenitor cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16659-16664.	7.1	656
36	Neurons born in the adult dentate gyrus form functional synapses with target cells. Nature Neuroscience, 2008, 11, 901-907.	14.8	640

#	Article	IF	CITATIONS
37	Human Adult Neurogenesis: Evidence and Remaining Questions. Cell Stem Cell, 2018, 23, 25-30.	11.1	601
38	Differentiation of adult hippocampus-derived progenitors into olfactory neurons in vivo. Nature, 1996, 383, 624-627.	27.8	599
39	Potential role for adult neurogenesis in the encoding of time in new memories. Nature Neuroscience, 2006, 9, 723-727.	14.8	589
40	Neural stem cells from adult hippocampus develop essential properties of functional CNS neurons. Nature Neuroscience, 2002, 5, 438-445.	14.8	588
41	Wnt-mediated activation of NeuroD1 and retro-elements during adult neurogenesis. Nature Neuroscience, 2009, 12, 1097-1105.	14.8	584
42	L1 retrotransposition in neurons is modulated by MeCP2. Nature, 2010, 468, 443-446.	27.8	572
43	Dentate gyrus-specific knockdown of adult neurogenesis impairs spatial and object recognition memory in adult rats. Learning and Memory, 2009, 16, 147-154.	1.3	562
44	NMDA-receptor-mediated, cell-specific integration of new neurons in adult dentate gyrus. Nature, 2006, 442, 929-933.	27.8	550
45	Directly Reprogrammed Human Neurons Retain Aging-Associated Transcriptomic Signatures and Reveal Age-Related Nucleocytoplasmic Defects. Cell Stem Cell, 2015, 17, 705-718.	11.1	545
46	Combined adult neurogenesis and BDNF mimic exercise effects on cognition in an Alzheimer's mouse model. Science, 2018, 361, .	12.6	536
47	Reduced Hippocampal Neurogenesis in Adult Transgenic Mice with Chronic Astrocytic Production of Interleukin-6. Journal of Neuroscience, 2002, 22, 486-492.	3.6	528
48	Modifiers of C9orf72 dipeptide repeat toxicity connect nucleocytoplasmic transport defects to FTD/ALS. Nature Neuroscience, 2015, 18, 1226-1229.	14.8	528
49	Adult-generated neurons in the dentate gyrus send axonal projections to field CA3 and are surrounded by synaptic vesicles. Journal of Comparative Neurology, 1999, 406, 449-460.	1.6	519
50	Regulation and Function of Adult Neurogenesis: From Genes to Cognition. Physiological Reviews, 2014, 94, 991-1026.	28.8	516
51	Synapse formation on neurons born in the adult hippocampus. Nature Neuroscience, 2007, 10, 727-734.	14.8	499
52	Mosaic Copy Number Variation in Human Neurons. Science, 2013, 342, 632-637.	12.6	488
53	Brain cell type–specific enhancer–promoter interactome maps and disease - risk association. Science, 2019, 366, 1134-1139.	12.6	486
54	Neural Stem Cells: Generating and Regenerating the Brain. Neuron, 2013, 80, 588-601.	8.1	479

#	Article	IF	CITATIONS
55	A role for adult TLX-positive neural stem cells in learning and behaviour. Nature, 2008, 451, 1004-1007.	27.8	469
56	Differential responses to lithium in hyperexcitable neurons from patients with bipolar disorder. Nature, 2015, 527, 95-99.	27.8	461
57	Experience-Specific Functional Modification of the Dentate Gyrus through Adult Neurogenesis: A Critical Period during an Immature Stage. Journal of Neuroscience, 2007, 27, 3252-3259.	3.6	455
58	Metabolic reprogramming during neuronal differentiation from aerobic glycolysis to neuronal oxidative phosphorylation. ELife, 2016, 5 , .	6.0	451
59	Altered synaptic physiology and reduced susceptibility to kainate-induced seizures in GluR6-deficient mice. Nature, 1998, 392, 601-605.	27.8	450
60	Adult-Born Hippocampal Dentate Granule Cells Undergoing Maturation Modulate Learning and Memory in the Brain. Journal of Neuroscience, 2009, 29, 13532-13542.	3.6	426
61	Signaling through BMPR-IA Regulates Quiescence and Long-Term Activity of Neural Stem Cells in the Adult Hippocampus. Cell Stem Cell, 2010, 7, 78-89.	11.1	417
62	The role of adult hippocampal neurogenesis in brain health and disease. Molecular Psychiatry, 2019, 24, 67-87.	7.9	416
63	Non-Cell-Autonomous Effect of Human SOD1G37R Astrocytes on Motor Neurons Derived from Human Embryonic Stem Cells. Cell Stem Cell, 2008, 3, 649-657.	11.1	414
64	The Adult Substantia Nigra Contains Progenitor Cells with Neurogenic Potential. Journal of Neuroscience, 2002, 22, 6639-6649.	3.6	408
65	Retinoic acid and neurotrophins collaborate to regulate neurogenesis in adult-derived neural stem cell cultures. Journal of Neurobiology, 1999, 38, 65-81.	3.6	384
66	Induced pluripotent stem cells: the new patient?. Nature Reviews Molecular Cell Biology, 2012, 13, 713-726.	37.0	377
67	Expression and function of orphan nuclear receptor TLX in adult neural stem cells. Nature, 2004, 427, 78-83.	27.8	368
68	Neurodegenerative disease and adult neurogenesis. European Journal of Neuroscience, 2011, 33, 1139-1151.	2.6	352
69	Altered proliferation and networks in neural cells derived from idiopathic autistic individuals. Molecular Psychiatry, 2017, 22, 820-835.	7.9	349
70	Mice lacking methyl-CpG binding protein 1 have deficits in adult neurogenesis and hippocampal function. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6777-6782.	7.1	346
71	Nuclear RNA-seq of single neurons reveals molecular signatures of activation. Nature Communications, 2016, 7, 11022.	12.8	343
72	Genomic Anatomy of the Hippocampus. Neuron, 2008, 60, 1010-1021.	8.1	337

#	Article	IF	Citations
73	Computational Influence of Adult Neurogenesis on Memory Encoding. Neuron, 2009, 61, 187-202.	8.1	335
74	Cell fusion-independent differentiation of neural stem cells to the endothelial lineage. Nature, 2004, 430, 350-356.	27.8	331
75	Seizure-Associated, Aberrant Neurogenesis in Adult Rats Characterized with Retrovirus-Mediated Cell Labeling. Journal of Neuroscience, 2007, 27, 9400-9407.	3.6	328
76	Signaling in Adult Neurogenesis. Annual Review of Cell and Developmental Biology, 2009, 25, 253-275.	9.4	324
77	RNA-sequencing from single nuclei. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19802-19807.	7.1	321
78	Morphological response of axotomized septal neurons to nerve growth factor. Journal of Comparative Neurology, 1988, 269, 147-155.	1.6	317
79	Functional Convergence of Neurons Generated in the Developing and Adult Hippocampus. PLoS Biology, 2006, 4, e409.	5.6	317
80	Neuronal medium that supports basic synaptic functions and activity of human neurons in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2725-34.	7.1	317
81	Cell-Surface Marker Signatures for the Isolation of Neural Stem Cells, Glia and Neurons Derived from Human Pluripotent Stem Cells. PLoS ONE, 2011, 6, e17540.	2.5	317
82	High-resolution comparative analysis of great ape genomes. Science, 2018, 360, .	12.6	304
83	Epigenetic choreographers of neurogenesis in the adult mammalian brain. Nature Neuroscience, 2010, 13, 1338-1344.	14.8	302
84	Tau Protein Disrupts Nucleocytoplasmic Transport in Alzheimer's Disease. Neuron, 2018, 99, 925-940.e7.	8.1	302
85	GABA-cAMP Response Element-Binding Protein Signaling Regulates Maturation and Survival of Newly Generated Neurons in the Adult Hippocampus. Journal of Neuroscience, 2009, 29, 7966-7977.	3.6	299
86	Enhancer Divergence and cis-Regulatory Evolution in the Human and Chimp Neural Crest. Cell, 2015, 163, 68-83.	28.9	299
87	IGF-I instructs multipotent adult neural progenitor cells to become oligodendrocytes. Journal of Cell Biology, 2004, 164, 111-122.	5. 2	294
88	2D and 3D Stem Cell Models of Primate Cortical Development Identify Species-Specific Differences in Progenitor Behavior Contributing to Brain Size. Cell Stem Cell, 2016, 18, 467-480.	11.1	292
89	What is memory? The present state of the engram. BMC Biology, 2016, 14, 40.	3.8	277
90	Transcriptional Signature and Memory Retention of Human-Induced Pluripotent Stem Cells. PLoS ONE, 2009, 4, e7076.	2.5	276

#	Article	IF	Citations
91	Neurogenic niche modulation by activated microglia: transforming growth factor \hat{l}^2 increases neurogenesis in the adult dentate gyrus. European Journal of Neuroscience, 2006, 23, 83-93.	2.6	275
92	Mutant Huntingtin promotes autonomous microglia activation via myeloid lineage-determining factors. Nature Neuroscience, 2014, 17, 513-521.	14.8	274
93	Identification of Astrocyte-expressed Factors That Modulate Neural Stem/Progenitor Cell Differentiation. Stem Cells and Development, 2006, 15, 407-421.	2.1	273
94	Orphan nuclear receptor TLX activates Wnt/ \hat{l}^2 -catenin signalling to stimulate neural stem cell proliferation and self-renewal. Nature Cell Biology, 2010, 12, 31-40.	10.3	273
95	Adult neurogenesis: integrating theories and separating functions. Trends in Cognitive Sciences, 2010, 14, 325-337.	7.8	262
96	Nerve growth factor receptor and choline acetyltransferase colocalization in neurons within the rat forebrain: Response to fimbria-fornix transection. Journal of Comparative Neurology, 1989, 284, 187-204.	1.6	258
97	Defining a Molecular Atlas of the Hippocampus Using DNA Microarrays and High-Throughput In Situ Hybridization. Journal of Neuroscience, 2004, 24, 3879-3889.	3.6	255
98	LINE-1 retrotransposons: mediators of somatic variation in neuronal genomes?. Trends in Neurosciences, 2010, 33, 345-354.	8.6	249
99	Monosynaptic inputs to new neurons in the dentate gyrus. Nature Communications, 2012, 3, 1107.	12.8	244
100	Directed differentiation of hippocampal stem/progenitor cells in the adult brain. Nature Neuroscience, 2008, 11, 888-893.	14.8	242
101	Evaluating cell reprogramming, differentiation and conversion technologies in neuroscience. Nature Reviews Neuroscience, 2016, 17, 424-437.	10.2	239
102	Generation of neuronal variability and complexity. Nature, 2006, 441, 1087-1093.	27.8	237
103	Modeling Hippocampal Neurogenesis Using Human Pluripotent Stem Cells. Stem Cell Reports, 2014, 2, 295-310.	4.8	231
104	Mobile DNA elements in the generation of diversity and complexity in the brain. Nature Reviews Neuroscience, 2014, 15, 497-506.	10.2	230
105	Exercise increases hippocampal neurogenesis to high levels but does not improve spatial learning in mice bred for increased voluntary wheel running Behavioral Neuroscience, 2003, 117, 1006-1016.	1.2	225
106	Differential L1 regulation in pluripotent stem cells of humans and apes. Nature, 2013, 503, 525-529.	27.8	220
107	Generation of multiciliated cells in functional airway epithelia from human induced pluripotent stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1723-30.	7.1	218
108	Ataxia telangiectasia mutated (ATM) modulates long interspersed element-1 (L1) retrotransposition in human neural stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20382-20387.	7.1	217

#	Article	IF	Citations
109	Pathological priming causes developmental gene network heterochronicity in autistic subject-derived neurons. Nature Neuroscience, 2019, 22, 243-255.	14.8	209
110	Review: adult neurogenesis contributes to hippocampal plasticity. Cell and Tissue Research, 2018, 373, 693-709.	2.9	207
111	Experience-dependent regulation of adult hippocampal neurogenesis: Effects of long-term stimulation and stimulus withdrawal. Hippocampus, 1999, 9, 321-332.	1.9	206
112	KCC2 rescues functional deficits in human neurons derived from patients with Rett syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 751-756.	7.1	206
113	Intersection of diverse neuronal genomes and neuropsychiatric disease: The Brain Somatic Mosaicism Network. Science, 2017, 356, .	12.6	206
114	Aging in a Dish: iPSC-Derived and Directly Induced Neurons for Studying Brain Aging and Age-Related Neurodegenerative Diseases. Annual Review of Genetics, 2018, 52, 271-293.	7.6	206
115	Th17 Lymphocytes Induce Neuronal Cell Death in a Human iPSC-Based Model of Parkinson's Disease. Cell Stem Cell, 2018, 23, 123-131.e6.	11.1	206
116	Epigenetic control of neural stem cell fate. Current Opinion in Genetics and Development, 2004, 14, 461-469.	3.3	204
117	Identities of Sequestered Proteins in Aggregates from Cells with Induced Polyglutamine Expression. Journal of Cell Biology, 2001, 153, 283-294.	5.2	200
118	Cell fusion causes confusion. Nature, 2002, 416, 485-487.	27.8	198
119	Mecp2 deficiency leads to delayed maturation and altered gene expression in hippocampal neurons. Neurobiology of Disease, 2007, 27, 77-89.	4.4	196
120	Signaling in adult neurogenesis. Current Opinion in Neurobiology, 2010, 20, 416-423.	4.2	191
121	Genetic and functional differences between multipotent neural and pluripotent embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11866-11872.	7.1	186
122	Spatial learning sculpts the dendritic arbor of adult-born hippocampal neurons. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7963-7968.	7.1	184
123	A Quantitative Framework to Evaluate Modeling of Cortical Development by Neural Stem Cells. Neuron, 2014, 83, 69-86.	8.1	184
124	Transcriptional profiling reveals strict boundaries between hippocampal subregions. Journal of Comparative Neurology, 2001, 441, 187-196.	1.6	178
125	Primate-Specific ORFO Contributes to Retrotransposon-Mediated Diversity. Cell, 2015, 163, 583-593.	28.9	177
126	Adeno-associated virus effectively mediates conditional gene modification in the brain. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2320-2325.	7.1	175

#	Article	IF	Citations
127	Environmental influence on L1 retrotransposons in the adult hippocampus. Hippocampus, 2009, 19, 1002-1007.	1.9	174
128	Gene Expression Profiling of Neural Stem Cells and Their Neuronal Progeny Reveals IGF2 as a Regulator of Adult Hippocampal Neurogenesis. Journal of Neuroscience, 2012, 32, 3376-3387.	3.6	173
129	A human neurodevelopmental model for Williams syndrome. Nature, 2016, 536, 338-343.	27.8	166
130	Induced pluripotent stem cells (iPSCs) and neurological disease modeling: progress and promises. Human Molecular Genetics, 2011, 20, R109-R115.	2.9	165
131	Differential properties of adult rat and mouse brain-derived neural stem/progenitor cells. Molecular and Cellular Neurosciences, 2006, 31, 560-573.	2.2	164
132	Robust in vivo gene transfer into adult mammalian neural stem cells by lentiviral vectors. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14835-14840.	7.1	163
133	L1-associated genomic regions are deleted in somatic cells of the healthy human brain. Nature Neuroscience, 2016, 19, 1583-1591.	14.8	159
134	The role of retrotransposable elements in ageing and age-associated diseases. Nature, 2021, 596, 43-53.	27.8	156
135	The Role of Transposable Elements in Health and Diseases of the Central Nervous System. Journal of Neuroscience, 2013, 33, 17577-17586.	3.6	155
136	Genetic influence on phenotypic differentiation in adult hippocampal neurogenesis. Developmental Brain Research, 2002, 134, 1-12.	1.7	150
137	Discussion point Stem cells of the central nervous system. Current Opinion in Neurobiology, 1998, 8, 671-676.	4.2	149
138	Adult neurogenesis in mammals. Science, 2019, 364, 827-828.	12.6	149
139	Cholinergic strategies for Alzheimer's disease. Journal of Molecular Medicine, 1998, 76, 555-567.	3.9	147
140	Selection of distinct populations of dentate granule cells in response to inputs as a mechanism for pattern separation in mice. ELife, 2013, 2, e00312.	6.0	140
141	Redefining the boundaries of the hippocampal CA2 subfield in the mouse using gene expression and 3-dimensional reconstruction. Journal of Comparative Neurology, 2005, 485, 1-10.	1.6	134
142	Adult Hippocampal Neurogenesis: A Coming-of-Age Story. Journal of Neuroscience, 2018, 38, 10401-10410.	3.6	134
143	CRISPR interference-based specific and efficient gene inactivation in the brain. Nature Neuroscience, 2018, 21, 447-454.	14.8	133
144	SOX2 primes the epigenetic landscape in neural precursors enabling proper gene activation during hippocampal neurogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1936-45.	7.1	131

#	Article	IF	Citations
145	The necessary junk: new functions for transposable elements. Human Molecular Genetics, 2007, 16, R159-R167.	2.9	128
146	Pluripotent stem cells in neurodegenerative and neurodevelopmental diseases. Human Molecular Genetics, 2010, 19, R71-R76.	2.9	127
147	Zika Virus Targets Glioblastoma Stem Cells through a SOX2-Integrin αvβ5 Axis. Cell Stem Cell, 2020, 26, 187-204.e10.	11.1	126
148	Differentiation of Inflammation-Responsive Astrocytes from Glial Progenitors Generated from Human Induced Pluripotent Stem Cells. Stem Cell Reports, 2017, 8, 1757-1769.	4.8	120
149	Retrovirus-mediated single-cell gene knockout technique in adult newborn neurons in vivo. Nature Protocols, 2006, 1, 3049-3055.	12.0	119
150	Nuclear receptor TLX prevents retinal dystrophy and recruits the corepressor atrophin1. Genes and Development, 2006, 20, 1308-1320.	5.9	119
151	Age-dependent instability of mature neuronal fate in induced neurons from Alzheimer's patients. Cell Stem Cell, 2021, 28, 1533-1548.e6.	11.1	119
152	Efficient Generation of CA3 Neurons from Human Pluripotent Stem Cells Enables Modeling of Hippocampal Connectivity InÂVitro. Cell Stem Cell, 2018, 22, 684-697.e9.	11.1	118
153	Adult neurogenesis: bridging the gap between mice and humans. Trends in Cell Biology, 2014, 24, 558-563.	7.9	117
154	Early life experience drives structural variation of neural genomes in mice. Science, 2018, 359, 1395-1399.	12.6	117
155	Alleviation of neuronal energy deficiency by mTOR inhibition as a treatment for mitochondria-related neurodegeneration. ELife, 2016, 5, .	6.0	117
156	Mitochondria, Metabolism, and Redox Mechanisms in Psychiatric Disorders. Antioxidants and Redox Signaling, 2019, 31, 275-317.	5.4	112
157	Bipotent progenitor cell lines from the human CNS. Nature Biotechnology, 1997, 15, 574-580.	17.5	111
158	Response of septal cholinergic neurons to axotomy. Journal of Comparative Neurology, 1987, 264, 421-436.	1.6	108
159	Dysregulation of miRNA-9 in a Subset of Schizophrenia Patient-Derived Neural Progenitor Cells. Cell Reports, 2016, 15, 1024-1036.	6.4	107
160	Modeling psychiatric disorders using patient stem cell-derived neurons: a way forward. Genome Medicine, 2018, 10, 1.	8.2	107
161	PI3K mediated electrotaxis of embryonic and adult neural progenitor cells in the presence of growth factors. Experimental Neurology, 2011, 227, 210-217.	4.1	104
162	Similar GABAergic inputs in dentate granule cells born during embryonic and adult neurogenesis. European Journal of Neuroscience, 2007, 25, 2973-2981.	2.6	103

#	Article	IF	Citations
163	A Distinctive layering pattern of mouse dentate granule cells is generated by developmental and adult neurogenesis. Journal of Comparative Neurology, 2010, 518, 4479-4490.	1.6	103
164	Roles of Heat Shock Factor 1 in Neuronal Response to Fetal Environmental Risks and Its Relevance to Brain Disorders. Neuron, 2014, 82, 560-572.	8.1	103
165	Emergence of a Homo sapiens-specific gene family and chromosome 16p11.2 CNV susceptibility. Nature, 2016, 536, 205-209.	27.8	102
166	Human iPSC Neurons Display Activity-Dependent Neurotransmitter Secretion: Aberrant Catecholamine Levels in Schizophrenia Neurons. Stem Cell Reports, 2014, 3, 531-538.	4.8	97
167	Nup153 Interacts with Sox2 to Enable Bimodal Gene Regulation and Maintenance of Neural Progenitor Cells. Cell Stem Cell, 2017, 21, 618-634.e7.	11.1	97
168	Epigenetic Regulation of the Stem Cell Mitogen Fgf-2 by Mbd1 in Adult Neural Stem/Progenitor Cells. Journal of Biological Chemistry, 2008, 283, 27644-27652.	3.4	95
169	Functional Implications of miR-19 in the Migration of Newborn Neurons in the Adult Brain. Neuron, 2016, 91, 79-89.	8.1	94
170	Species-specific maturation profiles of human, chimpanzee and bonobo neural cells. ELife, 2019, 8, .	6.0	94
171	Mitochondrial Aging Defects Emerge in Directly Reprogrammed Human Neurons due to Their Metabolic Profile. Cell Reports, 2018, 23, 2550-2558.	6.4	93
172	Hippocampal α-Synuclein in Dementia with Lewy Bodies Contributes to Memory Impairment and Is Consistent with Spread of Pathology. Journal of Neuroscience, 2017, 37, 1675-1684.	3.6	92
173	Expression of cytokines by multipotent neural progenitor cells. Cytokine, 2003, 22, 101-106.	3.2	85
174	<i>In vitro</i> myelin formation using embryonic stem cells. Development (Cambridge), 2015, 142, 2213-2225.	2.5	84
175	Regulation of voltage- and ligand-gated currents in rat hippocampal progenitor cellsin vitro. , 1997, 32, 95-110.		83
176	Intact piRNA pathway prevents L1 mobilization in male meiosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5635-E5644.	7.1	81
177	Chronotype and cellular circadian rhythms predict the clinical response to lithium maintenance treatment in patients with bipolar disorder. Neuropsychopharmacology, 2019, 44, 620-628.	5. 4	80
178	In vivo imaging of dendritic pruning in dentate granule cells. Nature Neuroscience, 2016, 19, 788-791.	14.8	79
179	Paradox of pattern separation and adult neurogenesis: A dual role for new neurons balancing memory resolution and robustness. Neurobiology of Learning and Memory, 2016, 129, 60-68.	1.9	78
180	Hippocampusâ€dependent learning is associated with adult neurogenesis in MRL/MpJ mice. Hippocampus, 2009, 19, 658-669.	1.9	75

#	Article	IF	Citations
181	How to make a hippocampal dentate gyrus granule neuron. Development (Cambridge), 2014, 141, 2366-2375.	2.5	74
182	Environmental enrichment and neurogenesis: from mice to humans. Current Opinion in Behavioral Sciences, 2015, 4, 56-62.	3.9	74
183	Concise Review: The Promise of Human Induced Pluripotent Stem Cell-Based Studies of Schizophrenia. Stem Cells, 2011, 29, 1915-1922.	3.2	73
184	Molecular Mechanisms of Bipolar Disorder: Progress Made and Future Challenges. Frontiers in Cellular Neuroscience, 2017, 11, 30.	3.7	73
185	The landscape of somatic mutation in cerebral cortex of autistic and neurotypical individuals revealed by ultra-deep whole-genome sequencing. Nature Neuroscience, 2021, 24, 176-185.	14.8	73
186	Creating Patient-Specific Neural Cells for the InÂVitro Study of Brain Disorders. Stem Cell Reports, 2015, 5, 933-945.	4.8	72
187	The Wnt Adaptor Protein ATP6AP2 Regulates Multiple Stages of Adult Hippocampal Neurogenesis. Journal of Neuroscience, 2015, 35, 4983-4998.	3.6	72
188	A novel environment-evoked transcriptional signature predicts reactivity in single dentate granule neurons. Nature Communications, 2018, 9, 3084.	12.8	72
189	An Epilepsy-Associated KCNT1 Mutation Enhances Excitability of Human iPSC-Derived Neurons by Increasing Slack K _{Na} Currents. Journal of Neuroscience, 2019, 39, 7438-7449.	3.6	70
190	Cytokine Regulation of Nerve Growth Factorâ€Mediated Cholinergic Neurotrophic Activity Synthesized by Astrocytes and Fibroblasts. Journal of Neurochemistry, 1992, 59, 919-931.	3.9	68
191	Incorporation of a nucleoside analog maps genome repair sites in postmitotic human neurons. Science, 2021, 372, 91-94.	12.6	68
192	Modeling Human Cytomegalovirus-Induced Microcephaly in Human iPSC-Derived Brain Organoids. Cell Reports Medicine, 2020, 1, 100002.	6.5	67
193	Dopaminergic Modulation of Cortical Inputs during Maturation of Adult-Born Dentate Granule Cells. Journal of Neuroscience, 2011, 31, 4113-4123.	3.6	66
194	Altered serotonergic circuitry in SSRI-resistant major depressive disorder patient-derived neurons. Molecular Psychiatry, 2019, 24, 808-818.	7.9	66
195	Serotonin-induced hyperactivity in SSRI-resistant major depressive disorder patient-derived neurons. Molecular Psychiatry, 2019, 24, 795-807.	7.9	64
196	The Pharmacogenomics of Bipolar Disorder study (PGBD): identification of genes for lithium response in a prospective sample. BMC Psychiatry, 2016, 16 , 129 .	2.6	61
197	Increased Neural Progenitor Proliferation in a hiPSC Model of Autism Induces Replication Stress-Associated Genome Instability. Cell Stem Cell, 2020, 26, 221-233.e6.	11.1	61
198	Paired Related Homeobox Protein 1 is a Regulator of Stemness in Adult Neural Stem/Progenitor Cells. Journal of Neuroscience, 2013, 33, 4066-4075.	3.6	60

#	Article	IF	Citations
199	Mechanisms of dietary flavonoid action in neuronal function and neuroinflammation. Molecular Aspects of Medicine, 2018, 61, 50-62.	6.4	59
200	\hat{l}_{\pm} -Synuclein-induced myelination deficit defines a novel interventional target for multiple system atrophy. Acta Neuropathologica, 2016, 132, 59-75.	7.7	58
201	Modeling neuropsychiatric disorders using human induced pluripotent stem cells. Protein and Cell, 2020, 11, 45-59.	11.0	58
202	Spontaneous Fusion and Nonclonal Growth of Adult Neural Stem Cells. Stem Cells, 2007, 25, 871-874.	3.2	54
203	Intermittent fasting enhances long-term memory consolidation, adult hippocampal neurogenesis, and expression of longevity gene Klotho. Molecular Psychiatry, 2021, 26, 6365-6379.	7.9	54
204	SRY-box-containing Gene 2 Regulation of Nuclear Receptor Tailless (Tlx) Transcription in Adult Neural Stem Cells. Journal of Biological Chemistry, 2012, 287, 5969-5978.	3.4	52
205	Prediction of response to drug therapy in psychiatric disorders. Open Biology, 2018, 8, 180031.	3.6	50
206	Age and damage induced changes in amyloid protein precursor immunohistochemistry in the rat brain. Journal of Comparative Neurology, 1994, 342, 69-77.	1.6	48
207	SnapShot: Adult Hippocampal Neurogenesis. Cell, 2014, 156, 1114-1114.e1.	28.9	45
208	Dependence of Hippocampal Function on ERRÎ ³ -Regulated Mitochondrial Metabolism. Cell Metabolism, 2015, 21, 628-636.	16.2	45
209	Enrichment rescues contextual discrimination deficit associated with immediate shock. Hippocampus, 2015, 25, 385-392.	1.9	45
210	AAV ablates neurogenesis in the adult murine hippocampus. ELife, 2021, 10, .	6.0	45
211	Neural stem cells: mechanisms and modeling. Protein and Cell, 2012, 3, 251-261.	11.0	44
212	Brain, Repair Yourself. Scientific American, 2003, 289, 46-53.	1.0	43
213	Survival of syngeneic and allogeneic iPSC–derived neural precursors after spinal grafting in minipigs. Science Translational Medicine, 2018, 10, .	12.4	42
214	Limits to human neurogenesisâ€"really?. Molecular Psychiatry, 2020, 25, 2207-2209.	7.9	42
215	Deficient LEF1 expression is associated with lithium resistance and hyperexcitability in neurons derived from bipolar disorder patients. Molecular Psychiatry, 2021, 26, 2440-2456.	7.9	41
216	Electroconvulsive seizure promotes spine maturation in newborn dentate granule cells in adult rat. Developmental Neurobiology, 2012, 72, 937-942.	3.0	40

#	Article	IF	Citations
217	GSK3ßâ€dependent dysregulation of neurodevelopment in SPG11â€patient induced pluripotent stem cell model. Annals of Neurology, 2016, 79, 826-840.	5.3	40
218	Conserved expression of transposon-derived non-coding transcripts in primate stem cells. BMC Genomics, 2017, 18, 214.	2.8	40
219	Spine morphogenesis in newborn granule cells is differentially regulated in the outer and middle molecular layers. Journal of Comparative Neurology, 2014, 522, 2756-2766.	1.6	39
220	Diverse Representations of Olfactory Information in Centrifugal Feedback Projections. Journal of Neuroscience, 2016, 36, 7535-7545.	3.6	39
221	Centrifugal Inputs to the Main Olfactory Bulb Revealed Through Whole Brain Circuit-Mapping. Frontiers in Neuroanatomy, 2018, 12, 115.	1.7	39
222	Mechanisms Underlying the Hyperexcitability of CA3 and Dentate Gyrus Hippocampal Neurons Derived From Patients With Bipolar Disorder. Biological Psychiatry, 2020, 88, 139-149.	1.3	39
223	REST Regulates Non–Cell-Autonomous Neuronal Differentiation and Maturation of Neural Progenitor Cells via Secretogranin II. Journal of Neuroscience, 2015, 35, 14872-14884.	3. 6	38
224	Chemical modulation of transcriptionally enriched signaling pathways to optimize the conversion of fibroblasts into neurons. ELife, 2019, 8 , .	6.0	38
225	Patch-Seq Protocol to Analyze the Electrophysiology, Morphology and Transcriptome of Whole Single Neurons Derived From Human Pluripotent Stem Cells. Frontiers in Molecular Neuroscience, 2018, 11, 261.	2.9	37
226	Enhanced Functional Recovery in MRL/MpJ Mice after Spinal Cord Dorsal Hemisection. PLoS ONE, 2012, 7, e30904.	2.5	36
227	Serotonin in psychiatry: in vitro disease modeling using patient-derived neurons. Cell and Tissue Research, 2018, 371, 161-170.	2.9	36
228	Cytoplasmic synthesis of endogenous <i>Alu</i> complementary DNA via reverse transcription and implications in age-related macular degeneration. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118 , .	7.1	36
229	New tools for human developmental biology. Nature Biotechnology, 2000, 18, 381-382.	17.5	34
230	Evolution of a transcriptional regulator from a transmembrane nucleoporin. Genes and Development, 2016, 30, 1155-1171.	5.9	34
231	Dopaminergic inputs in the dentate gyrus direct the choice of memory encoding. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5501-10.	7.1	34
232	Loss of the neural-specific BAF subunit ACTL6B relieves repression of early response genes and causes recessive autism. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10055-10066.	7.1	34
233	Closer to neurogenesis in adult humans. Nature Medicine, 1998, 4, 555-557.	30.7	33
234	Lamin B1 decline underlies ageâ€related loss of adult hippocampal neurogenesis. EMBO Journal, 2021, 40, e105819.	7.8	33

#	Article	IF	Citations
235	Microglia, complement and schizophrenia. Nature Neuroscience, 2019, 22, 333-334.	14.8	32
236	Cellular complexity in brain organoids: Current progress and unsolved issues. Seminars in Cell and Developmental Biology, 2021, 111, 32-39.	5.0	32
237	Differential distribution of amyloid protein precursor immunoreactivity in the rat brain studied by using five different antibodies. Journal of Comparative Neurology, 1994, 342, 78-96.	1.6	31
238	Circadian rhythms in bipolar disorder patient-derived neurons predict lithium response: preliminary studies. Molecular Psychiatry, 2021, 26, 3383-3394.	7.9	29
239	Modeling Brain Disorders Using Induced Pluripotent Stem Cells. Cold Spring Harbor Perspectives in Biology, 2020, 12, a035659.	5. 5	28
240	A Physiological Instability Displayed in Hippocampal Neurons Derived From Lithium-Nonresponsive Bipolar Disorder Patients. Biological Psychiatry, 2020, 88, 150-158.	1.3	28
241	Is neurogenesis reparative after status epilepticus?. Epilepsia, 2007, 48, 69-71.	5.1	27
242	The Adaptor Protein CD2AP Is a Coordinator of Neurotrophin Signaling-Mediated Axon Arbor Plasticity. Journal of Neuroscience, 2016, 36, 4259-4275.	3.6	27
243	What Makes Each Brain Unique. Scientific American, 2012, 306, 26-31.	1.0	26
244	Distinct roles of NMDA receptors at different stages of granule cell development in the adult brain. ELife, 2015, 4, e07871.	6.0	26
245	Somatic mosaicism reveals clonal distributions of neocortical development. Nature, 2022, 604, 689-696.	27.8	26
246	A Mechanism for Somatic Brain Mosaicism. Cell, 2016, 164, 593-595.	28.9	24
247	Machine learning reveals bilateral distribution of somatic L1 insertions in human neurons and glia. Nature Neuroscience, 2021, 24, 186-196.	14.8	22
248	Human-induced pluripotent stem cells pave the road for a better understanding of motor neuron disease. Human Molecular Genetics, 2014, 23, R27-R34.	2.9	21
249	Transcriptional and epigenetic mechanisms of cellular reprogramming to induced pluripotency. Epigenomics, 2016, 8, 1131-1149.	2.1	21
250	Generating human serotonergic neurons in vitro: Methodological advances. BioEssays, 2016, 38, 1123-1129.	2.5	20
251	Altered Neuronal Support and Inflammatory Response in Bipolar Disorder Patient-Derived Astrocytes. Stem Cell Reports, 2021, 16, 825-835.	4.8	20
252	Variations in brain defects result from cellular mosaicism in the activation of heat shock signalling. Nature Communications, 2017, 8, 15157.	12.8	19

#	Article	IF	Citations
253	Examining non-LTR retrotransposons in the context of the evolving primate brain. BMC Biology, 2017, 15, 68.	3.8	19
254	Sensing serotonin secreted from human serotonergic neurons using aptamer-modified nanopipettes. Molecular Psychiatry, 2021, 26, 2753-2763.	7.9	19
255	MicroRNAs in Post-traumatic Stress Disorder. Current Topics in Behavioral Neurosciences, 2017, 38, 23-46.	1.7	18
256	BrainImageR: spatiotemporal gene set analysis referencing the human brain. Bioinformatics, 2019, 35, 343-345.	4.1	18
257	Novel Tools, Classic Techniques: Evolutionary Studies Using Primate Pluripotent Stem Cells. Biological Psychiatry, 2014, 75, 929-935.	1.3	17
258	Synaptotagmin-7 is a key factor for bipolar-like behavioral abnormalities in mice. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4392-4399.	7.1	15
259	Transcriptional changes in sensory ganglia associated with primary afferent axon collateral sprouting in spared dermatome model. Genomics Data, 2015, 6, 249-252.	1.3	14
260	The effect of immature adult-born dentate granule cells on hyponeophagial behavior is related to their roles in learning and memory. Frontiers in Systems Neuroscience, 2015, 9, 34.	2.5	14
261	Dynamical Electrical Complexity Is Reduced during Neuronal Differentiation in Autism Spectrum Disorder. Stem Cell Reports, 2019, 13, 474-484.	4.8	13
262	Synaptotagmin-7 deficiency induces mania-like behavioral abnormalities through attenuating GluN2B activity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31438-31447.	7.1	13
263	Adult neurogenesis in neurological diseases. Science, 2021, 374, 1049-1050.	12.6	13
264	Environment-driven somatic mosaicism in brain disorders. Genome Medicine, 2016, 8, 58.	8.2	12
265	Adultâ€generated neurons in the dentate gyrus send axonal projections to field CA3 and are surrounded by synaptic vesicles. Journal of Comparative Neurology, 1999, 406, 449-460.	1.6	11
266	Chronic cortisol differentially impacts stem cell-derived astrocytes from major depressive disorder patients. Translational Psychiatry, 2021, 11, 608.	4.8	11
267	Changes in protein kinase C isozymes in the rat hippocampal formation following hippocampal lesion. Hippocampus, 1993, 3, 43-55.	1.9	10
268	Identification of bona fide B2 SINE retrotransposon transcription through single-nucleus RNA-seq of the mouse hippocampus. Genome Research, 2020, 30, 1643-1654.	5.5	10
269	Entrainment of Circadian Rhythms to Temperature Reveals Amplitude Deficits in Fibroblasts from Patients with Bipolar Disorder and Possible Links to Calcium Channels. Molecular Neuropsychiatry, 2019, 5, 115-124.	2.9	9
270	Inositol monophosphatase 1 (IMPA1) mutation in intellectual disability patients impairs neurogenesis but not gliogenesis. Molecular Psychiatry, 2021, 26, 3558-3571.	7.9	8

#	Article	lF	CITATIONS
271	Unbiased characterization of high-density oligonucleotide microarrays using probe-level statistics. Journal of Neuroscience Methods, 2004, 135, 27-33.	2.5	7
272	Transplantation in the future. Progress in Brain Research, 2012, 200, 7-13.	1.4	7
273	The $\langle i \rangle$ Rhox $\langle i \rangle$ gene cluster suppresses germline $\langle i \rangle$ LINE1 $\langle i \rangle$ transposition. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
274	Complement targeting of nonhuman sialic acid does not mediate cell death of human embryonic stem cells. Nature Medicine, 2006, 12, 1115-1115.	30.7	5
275	Mother's milk programs offspring's cognition. Nature Neuroscience, 2014, 17, 8-9.	14.8	5
276	Intracerebral xenografts: Sertoli cells to the rescue?. Nature Biotechnology, 1996, 14, 1650-1651.	17.5	4
277	Transplantation in the future. Progress in Brain Research, 2012, 201, 7-13.	1.4	4
278	MIR137: big impacts from small changes. Nature Neuroscience, 2015, 18, 931-933.	14.8	4
279	Aging and Rejuvenation: Insights from Rusty Gage, Leonard Guarente, and Amy Wagers. Trends in Molecular Medicine, 2016, 22, 633-634.	6.7	4
280	Alzheimer's Disease: Distinct Stages in Neurogenic Decline?. Biological Psychiatry, 2015, 77, 680-682.	1.3	2
281	Studying treatment resistance in depression using patient derived neurons in vitro. Molecular Psychiatry, 2019, 24, 775-775.	7.9	2
282	The When and Where: Molecular and Cellular Convergence in Autism. Biological Psychiatry, 2021, 89, 419-420.	1.3	2
283	Adult-generated neurons in the dentate gyrus send axonal projections to field CA3 and are surrounded by synaptic vesicles., 0, .		2
284	Oleic acid regulates hippocampal neurogenesis as a TLX ligand. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2203038119.	7.1	2
285	ADULT NEURAL PROGENITOR CELLS IN CNS FUNCTION AND DISEASE. , 2008, , 181-200.		1
286	A Distinctive layering pattern of mouse dentate granule cells is generated by developmental and adult neurogenesis. Journal of Comparative Neurology, 2010, 518, spc1-spc1.	1.6	1
287	Motoneuron expression profiling identifies an association between an axonal splice variant of HDGF-related protein 3 and peripheral myelination. Journal of Biological Chemistry, 2020, 295, 12233-12246.	3.4	1
288	Retrotransposition and Neuronal Diversity. , 2010, , 87-96.		1

#	Article	IF	CITATIONS
289	Human serotonergic neurons, selective serotonin reuptake inhibitor (SSRI) resistance and major depressive disorder., 2021,, 323-330.		O
290	To eat, or not to eat, that is the question: Neural stem cells escape phagocytosis in autism with macrocephaly. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2104888118.	7.1	0
291	Neuronal Genomic and Epigenetic Diversity. , 2013, , 281-298.		O