Li-Huei Tsai

List of Publications by Year
in descending order

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143 papers	35,957 citations	6486 82 h-index	11946 139 g-index
163 all docs	163 docs citations	163 times ranked	38203 citing authors

#	Article	IF	Citations
1	Dissecting the complexities of Alzheimer disease with in vitro models of the human brain. Nature Reviews Neurology, 2022, 18, 25-39.	4.9	30
2	Harnessing cerebral organoids for Alzheimer's disease research. Current Opinion in Neurobiology, 2022, 72, 120-130.	2.0	17
3	Down-syndrome-induced senescence disrupts the nuclear architecture of neural progenitors. Cell Stem Cell, 2022, 29, 116-130.e7.	5.2	41
4	Single-cell dissection of the human brain vasculature. Nature, 2022, 603, 893-899.	13.7	135
5	Histone Deacetylases 1 and 2 in Memory Function. ACS Chemical Neuroscience, 2022, 13, 848-858.	1.7	14
6	Mechanisms of DNA damageâ€mediated neurotoxicity in neurodegenerative disease. EMBO Reports, 2022, 23, e54217.	2.0	43
7	BACE-1 inhibition facilitates the transition from homeostatic microglia to DAM-1. Science Advances, 2022, 8, .	4.7	27
8	Exifone Is a Potent HDAC1 Activator with Neuroprotective Activity in Human Neuronal Models of Neurodegeneration. ACS Chemical Neuroscience, 2021, 12, 271-284.	1.7	14
9	Cell of all trades: oligodendrocyte precursor cells in synaptic, vascular, and immune function. Genes and Development, 2021, 35, 180-198.	2.7	68
10	APOE4 disrupts intracellular lipid homeostasis in human iPSC-derived glia. Science Translational Medicine, 2021, 13, .	5.8	141
11	Induction of specific brain oscillations may restore neural circuits and be used for the treatment of Alzheimer's disease. Journal of Internal Medicine, 2021, 290, 993-1009.	2.7	29
12	Neuronal enhancers get a break. Neuron, 2021, 109, 1766-1768.	3.8	5
13	Profiling DNA break sites and transcriptional changes in response to contextual fear learning. PLoS ONE, 2021, 16, e0249691.	1.1	29
14	Proteomic profiling dataset of chemical perturbations in multiple biological backgrounds. Scientific Data, 2021, 8, 226.	2.4	9
15	Three-dimensional chromatin organization in brain function and dysfunction. Current Opinion in Neurobiology, 2021, 69, 214-221.	2.0	10
16	APOE4-carrying human astrocytes oversupply cholesterol to promote neuronal lipid raft expansion and Aî² generation. Stem Cell Reports, 2021, 16, 2128-2137.	2.3	52
17	MEF2 is a key regulator of cognitive potential and confers resilience to neurodegeneration. Science Translational Medicine, 2021, 13, eabd7695.	5.8	37
18	Three decades of Cdk5. Journal of Biomedical Science, 2021, 28, 79.	2.6	52

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19	Telomerase reverse transcriptase preserves neuron survival and cognition in Alzheimerâ€™s disease models. Nature Aging, 2021, 1, 1162-1174.	5.3	24
20	Modeling Alzheimerâ€™s disease with iPSC-derived brain cells. Molecular Psychiatry, 2020, 25, 148-167.	4.1	263
21	Gamma Entrainment: Impact on Neurocircuits, Glia, and Therapeutic Opportunities. Trends in Neurosciences, 2020, 43, 24-41.	4.2	127
22	PICALM Rescues Endocytic Defects Caused by the Alzheimerâ€™s Disease Risk Factor APOE4. Cell Reports, 2020, 33, 108224.	2.9	49
23	Mapping the epigenomic and transcriptomic interplay during memory formation and recall in the hippocampal engram ensemble. Nature Neuroscience, 2020, 23, 1606-1617.	7.1	89
24	Meta-Analysis of the Alzheimerâ€™s Disease Human Brain Transcriptome and Functional Dissection in Mouse Models. Cell Reports, 2020, 32, 107908.	2.9	199
25	HDAC1 modulates OGG1-initiated oxidative DNA damage repair in the aging brain and Alzheimerâ€™s disease. Nature Communications, 2020, 11, 2484.	5.8	107
26	Reconstruction of the human bloodâ€“brain barrier in vitro reveals a pathogenic mechanism of APOE4 in pericytes. Nature Medicine, 2020, 26, 952-963.	15.2	173
27	Phosphoproteomics identifies microglial Siglecâ€F inflammatory response during neurodegeneration. Molecular Systems Biology, 2020, 16, e9819.	3.2	20
28	3D mapping reveals network-specific amyloid progression and subcortical susceptibility in mice. Communications Biology, 2019, 2, 360.	2.0	42
29	REST and Neural Gene Network Dysregulation in iPSC Models of Alzheimerâ€™s Disease. Cell Reports, 2019, 26, 1112-1127.e9.	2.9	150
30	Single-cell transcriptomic analysis of Alzheimerâ€™s disease. Nature, 2019, 570, 332-337.	13.7	1,528
31	Gamma Entrainment Binds Higher-Order Brain Regions and Offers Neuroprotection. Neuron, 2019, 102, 929-943.e8.	3.8	252
32	Examining the Role of HDACs in DNA Double-Strand Break Repair in Neurons. Methods in Molecular Biology, 2019, 1983, 225-234.	0.4	3
33	Multi-sensory Gamma Stimulation Ameliorates Alzheimerâ€™s-Associated Pathology and Improves Cognition. Cell, 2019, 177, 256-271.e22.	13.5	423
34	Unraveling the Paradox of Statins with Human Neurons: New Leads in Alzheimerâ€™s Disease. Cell Stem Cell, 2019, 24, 347-349.	5.2	12
35	The complexity of neuroinflammation at single-cell resolution. Nature Reviews Neurology, 2019, 15, 249-250.	4.9	2
36	A Library of Phosphoproteomic and Chromatin Signatures for Characterizing Cellular Responses to Drug Perturbations. Cell Systems, 2018, 6, 424-443.e7.	2.9	68

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37	A Developmental Switch in Microglial HDAC Function. Immunity, 2018, 48, 476-478.	6.6	6
38	APOE4 Causes Widespread Molecular and Cellular Alterations Associated with Alzheimerâ€™s Disease Phenotypes in Human iPSC-Derived Brain Cell Types. Neuron, 2018, 98, 1141-1154.e7.	3.8	665
39	Noninvasive 40-Hz light flicker to recruit microglia and reduce amyloid beta load. Nature Protocols, 2018, 13, 1850-1868.	5.5	70
40	Neurodegenerative Diseases and the Aging Brain. , 2018, , 509-526.		1
41	TFP5, a Peptide Inhibitor of Aberrant and Hyperactive Cdk5/p25, Attenuates Pathological Phenotypes and Restores Synaptic Function in CK-p25Tg Mice. Journal of Alzheimer's Disease, 2017, 56, 335-349.	1.2	29
42	MethyLock: DNA Demethylation Is the Epigenetic Key to Axon Regeneration. Neuron, 2017, 94, 221-223.	3.8	6
43	Noninvasive Deep Brain Stimulation via Temporally Interfering Electric Fields. Cell, 2017, 169, 1029-1041.e16.	13.5	536
44	In the loop: how chromatin topology links genome structure to function in mechanisms underlying learning and memory. Current Opinion in Neurobiology, 2017, 43, 48-55.	2.0	37
45	Temporal Tracking of Microglia Activation in Neurodegeneration at Single-Cell Resolution. Cell Reports, 2017, 21, 366-380.	2.9	538
46	Inhibition of p25/Cdk5 Attenuates Tauopathy in Mouse and iPSC Models of Frontotemporal Dementia. Journal of Neuroscience, 2017, 37, 9917-9924.	1.7	117
47	Loss of Protein Arginine Methyltransferase 8 Alters Synapse Composition and Function, Resulting in Behavioral Defects. Journal of Neuroscience, 2017, 37, 8655-8666.	1.7	36
48	The Transcription Factor Sp3 Cooperates with HDAC2 to Regulate Synaptic Function and Plasticity in Neurons. Cell Reports, 2017, 20, 1319-1334.	2.9	76
49	Self-Organizing 3D Human Neural Tissue Derived from Induced Pluripotent Stem Cells Recapitulate Alzheimerâ€™s Disease Phenotypes. PLoS ONE, 2016, 11, e0161969.	1.1	405
50	Gamma frequency entrainment attenuates amyloid load and modifies microglia. Nature, 2016, 540, 230-235.	13.7	812
51	S -nitrosation of proteins relevant to Alzheimerâ€™s disease during early stages of neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4152-4157.	3.3	76
52	What is memory? The present state of the engram. BMC Biology, 2016, 14, 40.	1.7	277
53	Efficient derivation of microglia-like cells from human pluripotent stem cells. Nature Medicine, 2016, 22, 1358-1367.	15.2	486
54	Histone deacetylase 3 associates with MeCP2 to regulate FOXO and social behavior. Nature Neuroscience, 2016, 19, 1497-1505.	7.1	88

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55	The road to restoring neural circuits for the treatment of Alzheimer's disease. Nature, 2016, 539, 187-196.	13.7	426
56	The Role of Epigenetic Mechanisms in the Regulation of Gene Expression in the Nervous System. Journal of Neuroscience, 2016, 36, 11427-11434.	1.7	109
57	Cdk5 is a New Rapid Synaptic Homeostasis Regulator Capable of Initiating the Early Alzheimer-Like Pathology. Cerebral Cortex, 2016, 26, 2937-2951.	1.6	23
58	Transient enhancement of proliferation of neural progenitors and impairment of their long-term survival in p25 transgenic mice. Oncotarget, 2016, 7, 39148-39161.	0.8	4
59	Basolateral amygdala bidirectionally modulates stress-induced hippocampal learning and memory deficits through a p25/Cdk5-dependent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7291-7296.	3.3	62
60	Activity-Induced DNA Breaks Govern the Expression of Neuronal Early-Response Genes. Cell, 2015, 161, 1592-1605.	13.5	566
61	The schizophrenia risk gene product miR-137 alters presynaptic plasticity. Nature Neuroscience, 2015, 18, 1008-1016.	7.1	191
62	JAKMIP1: Translating the Message for Social Behavior. Neuron, 2015, 88, 1070-1072.	3.8	4
63	HDAC2 expression in parvalbumin interneurons regulates synaptic plasticity in the mouse visual cortex. Neuroepigenetics, 2015, 1, 34-40.	2.8	27
64	Loss of Cyclin-Dependent Kinase 5 from Parvalbumin Interneurons Leads to Hyperinhibition, Decreased Anxiety, and Memory Impairment. Journal of Neuroscience, 2015, 35, 2372-2383.	1.7	26
65	Conserved epigenomic signals in mice and humans reveal immune basis of Alzheimerâ€™s disease. Nature, 2015, 518, 365-369.	13.7	526
66	Histone deacetylases in memory and cognition. Science Signaling, 2014, 7, re12.	1.6	149
67	On the resilience of remote traumatic memories against exposure therapyâ€mediated attenuation. EMBO Reports, 2014, 15, 853-861.	2.0	17
68	Epigenetic modifications in the nervous system and their impact upon cognitive impairments. Neuropharmacology, 2014, 80, 70-82.	2.0	95
69	Activity-Dependent p25 Generation Regulates Synaptic Plasticity and Aî²-Induced Cognitive Impairment. Cell, 2014, 157, 486-498.	13.5	74
70	Epigenetic Priming of Memory Updating during Reconsolidation to Attenuate Remote Fear Memories. Cell, 2014, 156, 261-276.	13.5	318
71	DNA Damage and Its Links to Neurodegeneration. Neuron, 2014, 83, 266-282.	3.8	494
72	Early remodeling of the neocortex upon episodic memory encoding. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11852-11857.	3.3	86

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73	Chromatin Regulation of DNA Damage Repair and Genome Integrity in the Central Nervous System. Journal of Molecular Biology, 2014, 426, 3376-3388.	2.0	39
74	Human Induced Pluripotent Stem Cells: Now Open to Discovery. Cell Stem Cell, 2014, 15, 4-6.	5.2	9
75	SIRT1 collaborates with ATM and HDAC1 to maintain genomic stability in neurons. Nature Neuroscience, 2013, 16, 1008-1015.	7.1	206
76	Tet1 Is Critical for Neuronal Activity-Regulated Gene Expression and Memory Extinction. Neuron, 2013, 79, 1109-1122.	3.8	393
77	Interaction of FUS and HDAC1 regulates DNA damage response and repair in neurons. Nature Neuroscience, 2013, 16, 1383-1391.	7.1	330
78	Histone acetylation: molecular mnemonics on the chromatin. Nature Reviews Neuroscience, 2013, 14, 97-111.	4.9	512
79	Forebrain-specific deletion of Cdk5 in pyramidal neurons results in mania-like behavior and cognitive impairment. Neurobiology of Learning and Memory, 2013, 105, 54-62.	1.0	21
80	Diaminothiazoles Modify Tau Phosphorylation and Improve the Tauopathy in Mouse Models*. Journal of Biological Chemistry, 2013, 288, 22042-22056.	1.6	41
81	A Dietary Regimen of Caloric Restriction or Pharmacological Activation of SIRT1 to Delay the Onset of Neurodegeneration. Journal of Neuroscience, 2013, 33, 8951-8960.	1.7	113
82	Crebinostat: A novel cognitive enhancer that inhibits histone deacetylase activity and modulates chromatin-mediated neuroplasticity. Neuropharmacology, 2013, 64, 81-96.	2.0	87
83	HDAC Inhibitors as Novel Therapeutics in Aging and Alzheimerâ€™s Disease. , 2013, , 225-248.		3
84	Regulation of N-type Voltage-Gated Calcium Channels and Presynaptic Function by Cyclin-Dependent Kinase 5. Neuron, 2012, 75, 675-687.	3.8	75
85	Mechanisms of Age-Related Cognitive Change and Targets for Intervention: Epigenetics. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2012, 67, 741-746.	1.7	56
86	An epigenetic blockade of cognitive functions in the neurodegenerating brain. Nature, 2012, 483, 222-226.	13.7	733
87	Probing the role of HDACs and mechanisms of chromatin-mediated neuroplasticity. Neurobiology of Learning and Memory, 2011, 96, 41-52.	1.0	90
88	Cyclin-Dependent Kinases in Brain Development and Disease. Annual Review of Cell and Developmental Biology, 2011, 27, 465-491.	4.0	277
89	Epigenetic Regulation of Gene Expression in Physiological and Pathological Brain Processes. Physiological Reviews, 2011, 91, 603-649.	13.1	315
90	Cdk5 Is Required for Memory Function and Hippocampal Plasticity via the cAMP Signaling Pathway. PLoS ONE, 2011, 6, e25735.	1.1	62

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91	A novel pathway regulates memory and plasticity via SIRT1 and miR-134. Nature, 2010, 466, 1105-1109.	13.7	864
92	Neural sirtuin 6 (Sirt6) ablation attenuates somatic growth and causes obesity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21790-21794.	3.3	160
93	Control of Activating Transcription Factor 4 (ATF4) Persistence by Multisite Phosphorylation Impacts Cell Cycle Progression and Neurogenesis*. Journal of Biological Chemistry, 2010, 285, 33324-33337.	1.6	68
94	Dixdc1 Is a Critical Regulator of DISC1 and Embryonic Cortical Development. Neuron, 2010, 67, 33-48.	3.8	132
95	HDAC2 negatively regulates memory formation and synaptic plasticity. Nature, 2009, 459, 55-60.	13.7	1,414
96	Driving fast-spiking cells induces gamma rhythm and controls sensory responses. Nature, 2009, 459, 663-667.	13.7	2,250
97	Cyclin-dependent kinases: a family portrait. Nature Cell Biology, 2009, 11, 1275-1276.	4.6	381
98	Alternative Functions of Core Cell Cycle Regulators in Neuronal Migration, Neuronal Maturation, and Synaptic Plasticity. Neuron, 2009, 62, 312-326.	3.8	107
99	Deregulation of HDAC1 by p25/Cdk5 in Neurotoxicity. Neuron, 2008, 60, 803-817.	3.8	262
100	Cep120 and TACCs Control Interkinetic Nuclear Migration and the Neural Progenitor Pool. Neuron, 2007, 56, 79-93.	3.8	161
101	Cdk5 Promotes Synaptogenesis by Regulating the Subcellular Distribution of the MAGUK Family Member CASK. Neuron, 2007, 56, 823-837.	3.8	111
102	A hippocampal Cdk5 pathway regulates extinction of contextual fear. Nature Neuroscience, 2007, 10, 1012-1019.	7.1	135
103	SIRT1 deacetylase protects against neurodegeneration in models for Alzheimer's disease and amyotrophic lateral sclerosis. EMBO Journal, 2007, 26, 3169-3179.	3.5	982
104	Spindle regulation in neural precursors of flies and mammals. Nature Reviews Neuroscience, 2007, 8, 89-100.	4.9	53
105	Recovery of learning and memory is associated with chromatin remodelling. Nature, 2007, 447, 178-182.	13.7	1,120
106	Doublecortin-like Kinase Controls Neurogenesis by Regulating Mitotic Spindles and M Phase Progression. Neuron, 2006, 49, 25-39.	3.8	131
107	p25/Cyclin-Dependent Kinase 5 Induces Production and Intraneuronal Accumulation of Amyloid beta In Vivo. Journal of Neuroscience, 2006, 26, 10536-10541.	1.7	192
108	miRNAs in the brain and the application of RNAi to neurons. , 2005, , 84-100.		0

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109	G Protein Î²Î³ Subunits and AGS3 Control Spindle Orientation and Asymmetric Cell Fate of Cerebral Cortical Progenitors. Cell, 2005, 122, 119-131.	13.5	244
110	Nucleokinesis in Neuronal Migration. Neuron, 2005, 46, 383-388.	3.8	325
111	Opposing Roles of Transient and Prolonged Expression of p25 in Synaptic Plasticity and Hippocampus-Dependent Memory. Neuron, 2005, 48, 825-838.	3.8	259
112	Cyclin-Dependent Kinase 5 Phosphorylates the N-Terminal Domain of the Postsynaptic Density Protein PSD-95 in Neurons. Journal of Neuroscience, 2004, 24, 865-876.	1.7	208
113	A Jekyll and Hyde kinase: roles for Cdk5 in brain development and disease. Current Opinion in Neurobiology, 2004, 14, 390-394.	2.0	163
114	Cdk5, a therapeutic target for Alzheimer's disease?. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1697, 137-142.	1.1	96
115	Cdk5 deregulation in the pathogenesis of Alzheimer's disease. Trends in Molecular Medicine, 2004, 10, 452-458.	3.5	232
116	Cdk5 Phosphorylation of Doublecortin Ser297 Regulates Its Effect on Neuronal Migration. Neuron, 2004, 41, 215-227.	3.8	220
117	Molecular Mechanisms Underlying Migration and Positioning of Neurons in the Developing Neocortex. Microscopy and Microanalysis, 2004, 10, 1462-1463.	0.2	0
118	Serine 732 Phosphorylation of FAK by Cdk5 Is Important for Microtubule Organization, Nuclear Movement, and Neuronal Migration. Cell, 2003, 114, 469-482.	13.5	289
119	Aberrant Cdk5 Activation by p25 Triggers Pathological Events Leading to Neurodegeneration and Neurofibrillary Tangles. Neuron, 2003, 40, 471-483.	3.8	567
120	APP processing is regulated by cytoplasmic phosphorylation. Journal of Cell Biology, 2003, 163, 83-95.	2.3	393
121	GC Box-binding Transcription Factors Control the Neuronal Specific Transcription of the Cyclin-dependent Kinase 5 Regulator p35. Journal of Biological Chemistry, 2002, 277, 4455-4464.	1.6	43
122	A survey of Cdk5 activator p35 and p25 levels in Alzheimer's disease brains. FEBS Letters, 2002, 523, 58-62.	1.3	154
123	The Cyclin-Dependent Kinase 5 Activators p35 and p39 Interact with the Î±-Subunit of Ca2+/Calmodulin-Dependent Protein Kinase II and Îą-Actinin-1 in a Calcium-Dependent Manner. Journal of Neuroscience, 2002, 22, 7879-7891.	1.7	112
124	p35 and p39 Are Essential for Cyclin-Dependent Kinase 5 Function during Neurodevelopment. Journal of Neuroscience, 2001, 21, 6758-6771.	1.7	361
125	A decade of CDK5. Nature Reviews Molecular Cell Biology, 2001, 2, 749-759.	16.1	983
126	Amphiphysin 1 Binds the Cyclin-dependent Kinase (cdk) 5 Regulatory Subunit p35 and Is Phosphorylated by cdk5 and cdc2. Journal of Biological Chemistry, 2001, 276, 8104-8110.	1.6	116

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127	Neurotoxicity induces cleavage of p35 to p25 by calpain. Nature, 2000, 405, 360-364.	13.7	985
128	Regulation of N-cadherin-mediated adhesion by the p35â€“Cdk5 kinase. Current Biology, 2000, 10, 363-372.	1.8	191
129	NUDEL Is a Novel Cdk5 Substrate that Associates with LIS1 and Cytoplasmic Dynein. Neuron, 2000, 28, 697-711.	3.8	447
130	Cables Links Cdk5 and c-Abl and Facilitates Cdk5 Tyrosine Phosphorylation, Kinase Upregulation, and Neurite Outgrowth. Neuron, 2000, 26, 633-646.	3.8	367
131	Conversion of p35 to p25 deregulates Cdk5 activity and promotes neurodegeneration. Nature, 1999, 402, 615-622.	13.7	1,424
132	Phosphorylation of DARPP-32 by Cdk5 modulates dopamine signalling in neurons. Nature, 1999, 402, 669-671.	13.7	538
133	Callosal axon guidance defects in p35?/? mice. , 1999, 415, 218-229.		69
134	The p35/Cdk5 kinase is a neuron-specific Rac effector that inhibits Pak1 activity. Nature, 1998, 395, 194-198.	13.7	380
135	A novel disruption of cortical development inp35?/? mice distinct fromreeler. , 1998, 395, 510-522.		147
136	A novel disruption of cortical development in p35â^'/â^' mice distinct from reeler. , 1998, 395, 510.		1
137	Mice Lacking p35, a Neuronal Specific Activator of Cdk5, Display Cortical Lamination Defects, Seizures, and Adult Lethality. Neuron, 1997, 18, 29-42.	3.8	743
138	Temporal and spatial patterns of expression of p35, a regulatory subunit of cyclin-dependent kinase 5, in the nervous system of the mouse. Journal of Neurocytology, 1997, 26, 283-296.	1.6	72
139	Differential Cellular Phosphorylation of Neurofilament Heavy Sideâ€Arms by Glycogen Synthase Kinaseâ€3 and Cyclinâ€Dependent Kinaseâ€5. Journal of Neurochemistry, 1996, 66, 1698-1706.	2.1	120
140	p35 is a neural-specific regulatory subunit of cyclin-dependent kinase 5. Nature, 1994, 371, 419-423.	13.7	885
141	Independent binding of the retinoblastoma protein and p107 to the transcription factor E2F. Nature, 1992, 355, 176-179.	13.7	415
142	Isolation of the human cdk2 gene that encodes the cyclin A- and adenovirus E1A-associated p33 kinase. Nature, 1991, 353, 174-177.	13.7	526
143	A decade of CDK5. , 0, .		1