Lennart Mucke

List of Publications by Year
in descending order

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124	37,972	5248	16605
papers	citations	83 h-index	123 g-index

131	131	131	32348
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	TAU ablation in excitatory neurons and postnatal TAU knockdown reduce epilepsy, SUDEP, and autism behaviors in a Dravet syndrome model. Science Translational Medicine, 2022, 14, eabm5527.	5.8	17
2	Tau: Enabler of diverse brain disorders and target of rapidly evolving therapeutic strategies. Science, 2021, 371, .	6.0	133
3	Phenotypic Differences between the Alzheimerâ€™s Disease-Related hAPP-J20 Model and HeterozygousZbtb20Knock-Out Mice. ENeuro, 2021, 8, ENEURO.0089-21.2021.	0.9	8
4	Effect of Levetiracetam on Cognition in Patients With Alzheimer Disease With and Without Epileptiform Activity. JAMA Neurology, 2021, 78, 1345.	4.5	109
5	Tau reduction affects excitatory and inhibitory neurons differently, reduces excitation/inhibition ratios, and counteracts network hypersynchrony. Cell Reports, 2021, 37, 109855.	2.9	42
6	Interdependence of neural network dysfunction and microglial alterations in Alzheimerâ€™s disease-related models. IScience, 2021, 24, 103245.	1.9	11
7	A second X chromosome contributes to resilience in a mouse model of Alzheimerâ€™s disease. Science Translational Medicine, 2020, 12, .	5.8	107
8	Behavioral and neural network abnormalities in human APP transgenic mice resemble those of App knock-in mice and are modulated by familial Alzheimerâ€™s disease mutations but not by inhibition of BACE1. Molecular Neurodegeneration, 2020, 15, 53.	4.4	44
9	Tau Reduction Prevents Key Features of Autism in Mouse Models. Neuron, 2020, 106, 421-437.e11.	3.8	60
10	Long-term potentiation is independent of the C-tail of the GluA1 AMPA receptor subunit. ELife, 2020, 9, .	2.8	25
11	Fibrinogen Induces Microglia-Mediated Spine Elimination and Cognitive Impairment in an Alzheimerâ€™s Disease Model. Neuron, 2019, 101, 1099-1108.e6.	3.8	252
12	Early neuronal accumulation of DNA double strand breaks in Alzheimerâ€™s disease. Acta Neuropathologica Communications, 2019, 7, 77.	2.4	145
13	Nav1.1-Overexpressing Interneuron Transplants Restore Brain Rhythms and Cognition in a Mouse Model of Alzheimerâ€™s Disease. Neuron, 2018, 98, 75-89.e5.	3.8	169
14	Istradefylline reduces memory deficits in aging mice with amyloid pathology. Neurobiology of Disease, 2018, 110, 29-36.	2.1	75
15	Klotho controls the brainâ€“immune system interface in the choroid plexus. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11388-E11396.	3.3	96
16	Fibrin-targeting immunotherapy protects against neuroinflammation and neurodegeneration. Nature Immunology, 2018, 19, 1212-1223.	7.0	149
17	The mouse as a model for neuropsychiatric drug development. Current Biology, 2018, 28, R909-R914.	1.8	26
18	The Psychiatric Cell Map Initiative: A Convergent Systems Biological Approach to Illuminating Key Molecular Pathways in Neuropsychiatric Disorders. Cell, 2018, 174, 505-520.	13.5	108

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19	Neuronal levels and sequence of tau modulate the power of brain rhythms. Neurobiology of Disease, 2018, 117, 181-188.	2.1	33
20	Phosphorylation of tau at Y18, but not tau-fyn binding, is required for tau to modulate NMDA receptor-dependent excitotoxicity in primary neuronal culture. Molecular Neurodegeneration, 2017, 12, 41.	4.4	65
21	The integration site of the APP transgene in the J20 mouse model of Alzheimerâ€™s disease. Wellcome Open Research, 2017, 2, 84.	0.9	15
22	The integration site of the APP transgene in the J20 mouse model of Alzheimerâ€™s disease. Wellcome Open Research, 2017, 2, 84.	0.9	15
23	Increasing the Receptor Tyrosine Kinase EphB2 Prevents Amyloid-Î²-induced Depletion of Cell Surface Glutamate Receptors by a Mechanism That Requires the PDZ-binding Motif of EphB2 and Neuronal Activity. Journal of Biological Chemistry, 2016, 291, 1719-1734.	1.6	27
24	Incidence and impact of subclinical epileptiform activity in Alzheimer's disease. Annals of Neurology, 2016, 80, 858-870.	2.8	373
25	Network abnormalities and interneuron dysfunction in Alzheimer disease. Nature Reviews Neuroscience, 2016, 17, 777-792.	4.9	685
26	Tau Phosphorylationâ€”Much More than a Biomarker. Neuron, 2016, 92, 265-267.	3.8	8
27	Expression of A152T human tau causes ageâ€dependent neuronal dysfunction and loss in transgenic mice. EMBO Reports, 2016, 17, 530-551.	2.0	103
28	Network dysfunction in Î±â€synuclein transgenic mice and human Lewy body dementia. Annals of Clinical and Translational Neurology, 2015, 2, 1012-1028.	1.7	46
29	Life Extension Factor Klotho Prevents Mortality and Enhances Cognition in hAPP Transgenic Mice. Journal of Neuroscience, 2015, 35, 2358-2371.	1.7	157
30	Astrocytic adenosine receptor A2A and Gs-coupled signaling regulate memory. Nature Neuroscience, 2015, 18, 423-434.	7.1	221
31	Tau post-translational modifications in wild-type and human amyloid precursor protein transgenic mice. Nature Neuroscience, 2015, 18, 1183-1189.	7.1	377
32	Tau reduction prevents AÎ²-induced axonal transport deficits by blocking activation of GSK3Î². Journal of Cell Biology, 2015, 209, 419-433.	2.3	126
33	DNA repair factor BRCA1 depletion occurs in Alzheimer brains and impairs cognitive function in mice. Nature Communications, 2015, 6, 8897.	5.8	143
34	Progranulin protects against amyloid Î² deposition and toxicity in Alzheimer's disease mouse models. Nature Medicine, 2014, 20, 1157-1164.	15.2	195
35	Tau reduction prevents disease in a mouse model of <scp>D</scp>ravet syndrome. Annals of Neurology, 2014, 76, 443-456.	2.8	117
36	Life Extension Factor Klotho Enhances Cognition. Cell Reports, 2014, 7, 1065-1076.	2.9	243

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37	Tau Reduction Diminishes Spatial Learning and Memory Deficits after Mild Repetitive Traumatic Brain Injury in Mice. PLoS ONE, 2014, 9, e115765.	1.1	78
38	Seizures and Epileptiform Activity in the Early Stages of Alzheimer Disease. JAMA Neurology, 2013, 70, 1158.	4.5	566
39	Age-appropriate cognition and subtle dopamine-independent motor deficits in aged Tau knockout mice. Neurobiology of Aging, 2013, 34, 1523-1529.	1.5	102
40	Physiologic brain activity causes DNA double-strand breaks in neurons, with exacerbation by amyloid-Î². Nature Neuroscience, 2013, 16, 613-621.	7.1	397
41	Neurotoxicity of Amyloid Â-Protein: Synaptic and Network Dysfunction. Cold Spring Harbor Perspectives in Medicine, 2012, 2, a006338-a006338.	2.9	844
42	Levetiracetam suppresses neuronal network dysfunction and reverses synaptic and cognitive deficits in an Alzheimerâ€™s disease model. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2895-903.	3.3	528
43	Alzheimer Mechanisms and Therapeutic Strategies. Cell, 2012, 148, 1204-1222.	13.5	1,548
44	Inhibitory Interneuron Deficit Links Altered Network Activity and Cognitive Dysfunction in Alzheimer Model. Cell, 2012, 149, 708-721.	13.5	934
45	Human P301L-Mutant Tau Expression in Mouse Entorhinal-Hippocampal Network Causes Tau Aggregation and Presynaptic Pathology but No Cognitive Deficits. PLoS ONE, 2012, 7, e45881.	1.1	111
46	Selective targeting of microglia by quantum dots. Journal of Neuroinflammation, 2012, 9, 22.	3.1	64
47	The Many Faces of Tau. Neuron, 2011, 70, 410-426.	3.8	734
48	Reversing EphB2 depletion rescues cognitive functions in Alzheimer model. Nature, 2011, 469, 47-52.	13.7	371
49	Amyloid-Î²/Fynâ€“Induced Synaptic, Network, and Cognitive Impairments Depend on Tau Levels in Multiple Mouse Models of Alzheimer's Disease. Journal of Neuroscience, 2011, 31, 700-711.	1.7	582
50	Ablation of Cellular Prion Protein Does Not Ameliorate Abnormal Neural Network Activity or Cognitive Dysfunction in the J20 Line of Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2011, 31, 10427-10431.	1.7	115
51	Tau Reduction Prevents AÎ²-Induced Defects in Axonal Transport. Science, 2010, 330, 198-198.	6.0	436
52	Synaptic Depression and Aberrant Excitatory Network Activity in Alzheimerâ€™s Disease: Two Faces of the Same Coin?. NeuroMolecular Medicine, 2010, 12, 48-55.	1.8	138
53	Amyloid-Î²â€“induced neuronal dysfunction in Alzheimer's disease: from synapses toward neural networks. Nature Neuroscience, 2010, 13, 812-818.	7.1	1,390
54	Many Neuronal and Behavioral Impairments in Transgenic Mouse Models of Alzheimer's Disease Are Independent of Caspase Cleavage of the Amyloid Precursor Protein. Journal of Neuroscience, 2010, 30, 372-381.	1.7	135

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55	Phospholipase A2 and arachidonic acid in Alzheimer's disease. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2010, 1801, 784-790.	1.2	124
56	Transsynaptic Progression of Amyloid-Î²-Induced Neuronal Dysfunction within the Entorhinal-Hippocampal Network. Neuron, 2010, 68, 428-441.	3.8	279
57	Cellular Source of Apolipoprotein E4 Determines Neuronal Susceptibility to Excitotoxic Injury in Transgenic Mice. American Journal of Pathology, 2010, 177, 563-569.	1.9	61
58	Quantifying Biomarkers of Cognitive Dysfunction and Neuronal Network Hyperexcitability in Mouse Models of Alzheimerâ€™s Disease: Depletion of Calcium-Dependent Proteins and Inhibitory Hippocampal Remodeling. Methods in Molecular Biology, 2010, 670, 245-262.	0.4	67
59	Neprilysin Overexpression Inhibits Plaque Formation But Fails to Reduce Pathogenic AÎ² Oligomers and Associated Cognitive Deficits in Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2009, 29, 1977-1986.	1.7	139
60	Epilepsy and Cognitive Impairments in Alzheimer Disease. Archives of Neurology, 2009, 66, 435.	4.9	581
61	Alzheimer's disease. Nature, 2009, 461, 895-897.	13.7	374
62	Collagen VI protects neurons against AÎ² toxicity. Nature Neuroscience, 2009, 12, 119-121.	7.1	129
63	Phospholipase A2 reduction ameliorates cognitive deficits in a mouse model of Alzheimer's disease. Nature Neuroscience, 2008, 11, 1311-1318.	7.1	314
64	Altered navigational strategy use and visuospatial deficits in hAPP transgenic mice. Neurobiology of Aging, 2008, 29, 253-266.	1.5	46
65	Paths of Convergence: Sirtuins in Aging and Neurodegeneration. Neuron, 2008, 58, 10-14.	3.8	164
66	Enkephalin Elevations Contribute to Neuronal and Behavioral Impairments in a Transgenic Mouse Model of Alzheimer's Disease. Journal of Neuroscience, 2008, 28, 5007-5017.	1.7	70
67	Accelerating Amyloid-Î² Fibrillization Reduces Oligomer Levels and Functional Deficits in Alzheimer Disease Mouse Models*. Journal of Biological Chemistry, 2007, 282, 23818-23828.	1.6	375
68	Reelin Depletion in the Entorhinal Cortex of Human Amyloid Precursor Protein Transgenic Mice and Humans with Alzheimer's Disease. Journal of Neuroscience, 2007, 27, 2727-2733.	1.7	160
69	Aberrant Excitatory Neuronal Activity and Compensatory Remodeling of Inhibitory Hippocampal Circuits in Mouse Models of Alzheimer's Disease. Neuron, 2007, 55, 697-711.	3.8	1,371
70	Reducing Endogenous Tau Ameliorates Amyloid Â-Induced Deficits in an Alzheimer's Disease Mouse Model. Science, 2007, 316, 750-754.	6.0	1,684
71	100 Years and Counting: Prospects for Defeating Alzheimer's Disease. Science, 2006, 314, 781-784.	6.0	505
72	Antiamyloidogenic and Neuroprotective Functions of Cathepsin B: Implications for Alzheimer's Disease. Neuron, 2006, 51, 703-714.	3.8	362

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73	Deficiency in neuronal TGF-Î² signaling promotes neurodegeneration and Alzheimerâ€™s pathology. Journal of Clinical Investigation, 2006, 116, 3060-3069.	3.9	302
74	A network dysfunction perspective on neurodegenerative diseases. Nature, 2006, 443, 768-773.	13.7	566
75	PKCÂ increases endothelin converting enzyme activity and reduces amyloid plaque pathology in transgenic mice. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8215-8220.	3.3	118
76	Reduction in Mitochondrial Superoxide Dismutase Modulates Alzheimer's Disease-Like Pathology and Accelerates the Onset of Behavioral Changes in Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2006, 26, 5167-5179.	1.7	225
77	SIRT1 Protects against Microglia-dependent Amyloid-Î² Toxicity through Inhibiting NF-ÎºB Signaling. Journal of Biological Chemistry, 2005, 280, 40364-40374.	1.6	677
78	Vulnerability of Dentate Granule Cells to Disruption of Arc Expression in Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2005, 25, 9686-9693.	1.7	138
79	High Î²-Secretase Activity Elicits Neurodegeneration in Transgenic Mice Despite Reductions in Amyloid-Î² Levels. Journal of Biological Chemistry, 2005, 280, 32957-32967.	1.6	89
80	Fyn Kinase Induces Synaptic and Cognitive Impairments in a Transgenic Mouse Model of Alzheimer's Disease. Journal of Neuroscience, 2005, 25, 9694-9703.	1.7	306
81	Neuron-Specific Apolipoprotein E4 Proteolysis Is Associated with Increased Tau Phosphorylation in Brains of Transgenic Mice. Journal of Neuroscience, 2004, 24, 2527-2534.	1.7	342
82	Fyn Kinase Modulates Synaptotoxicity, But Not Aberrant Sprouting, in Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2004, 24, 4692-4697.	1.7	156
83	Intracellularly generated amyloid-Î² peptide counteracts the antiapoptotic function of its precursor protein and primes proapoptotic pathways for activation by other insults in neuroblastoma cells. Journal of Neurochemistry, 2004, 91, 1260-1274.	2.1	29
84	Aggressive amyloidosis in mice expressing human amyloid peptides with the Arctic mutation. Nature Medicine, 2004, 10, 1190-1192.	15.2	125
85	Apolipoprotein E: Diversity of Cellular Origins, Structural and Biophysical Properties, and Effects in Alzheimer's Disease. Journal of Molecular Neuroscience, 2004, 23, 189-204.	1.1	184
86	Food for Thought. Neuron, 2004, 43, 596-599.	3.8	2
87	Carboxyl-terminal-truncated apolipoprotein E4 causes Alzheimer's disease-like neurodegeneration and behavioral deficits in transgenic mice. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10966-10971.	3.3	306
88	Neuronal depletion of calcium-dependent proteins in the dentate gyrus is tightly linked to Alzheimer's disease-related cognitive deficits. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9572-9577.	3.3	363
89	Inflammation in Neurodegenerative Diseaseâ€”A Double-Edged Sword. Neuron, 2002, 35, 419-432.	3.8	1,075
90	Androgens Protect against Apolipoprotein E4-Induced Cognitive Deficits. Journal of Neuroscience, 2002, 22, 5204-5209.	1.7	171

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91	Modulation of Alzheimer-Like Synaptic and Cholinergic Deficits in Transgenic Mice by Human Apolipoprotein E Depends on Isoform , Aging, and Overexpression of Amyloid Î² Peptides But Not on Plaque Formation. Journal of Neuroscience, 2002, 22, 10539-10548.	1.7	172
92	TGF-Î²1 promotes microglial amyloid-Î² clearance and reduces plaque burden in transgenic mice. Nature Medicine, 2001, 7, 612-618.	15.2	575
93	Ibuprofen, inflammation and Alzheimer disease. Nature Medicine, 2000, 6, 973-974.	15.2	54
94	Apolipoprotein E and cognitive performance. Nature, 2000, 404, 352-354.	13.7	219
95	Hypothalamicâ€“Pituitaryâ€“Adrenal Dysfunction inApoe^{â^'/â^'}Mice: Possible Role in Behavioral and Metabolic Alterations. Journal of Neuroscience, 2000, 20, 2064-2071.	1.7	119
96	High-Level Neuronal Expression of Aβ_{1â€“42}in Wild-Type Human Amyloid Protein Precursor Transgenic Mice: Synaptotoxicity without Plaque Formation. Journal of Neuroscience, 2000, 20, 4050-4058.	1.7	1,759
97	Chronic Overproduction of Transforming Growth Factor-Î²1 by Astrocytes Promotes Alzheimer's Disease-Like Microvascular Degeneration in Transgenic Mice. American Journal of Pathology, 2000, 156, 139-150.	1.9	226
98	Astroglial Expression of Human Î±1-Antichymotrypsin Enhances Alzheimer-like Pathology in Amyloid Protein Precursor Transgenic Mice. American Journal of Pathology, 2000, 157, 2003-2010.	1.9	125
99	Dopaminergic Loss and Inclusion Body Formation in -Synuclein Mice: Implications for Neurodegenerative Disorders. Science, 2000, 287, 1265-1269.	6.0	1,691
100	Expression of Human Apolipoprotein E3 or E4 in the Brains ofApoe^{â^'/â^'}Mice: Isoform-Specific Effects on Neurodegeneration. Journal of Neuroscience, 1999, 19, 4867-4880.	1.7	334
101	Genetically-targeted and conditionally-regulated ablation of astroglial cells in the central, enteric and peripheral nervous systems in adult transgenic mice1Published on the World Wide Web on 7 June 1999.1. Brain Research, 1999, 835, 91-95.	1.1	48
102	Leukocyte Infiltration, Neuronal Degeneration, and Neurite Outgrowth after Ablation of Scar-Forming, Reactive Astrocytes in Adult Transgenic Mice. Neuron, 1999, 23, 297-308.	3.8	957
103	Elimination of the Class A Scavenger Receptor Does Not Affect Amyloid Plaque Formation or Neurodegeneration in Transgenic Mice Expressing Human Amyloid Protein Precursors. American Journal of Pathology, 1999, 155, 1741-1747.	1.9	64
104	Novel role of human CD4 molecule identified in neurodegeneration. Nature Medicine, 1998, 4, 441-446.	15.2	26
105	Fulminant Jejuno-Ileitis following Ablation of Enteric Glia in Adult Transgenic Mice. Cell, 1998, 93, 189-201.	13.5	530
106	Amyloid Protein Precursor Stimulates Excitatory Amino Acid Transport. Journal of Biological Chemistry, 1998, 273, 12548-12554.	1.6	50
107	Corticotropin-releasing Factor and Adrenocorticotrophic Hormone as Potential Central Mediators of OB Effects. Journal of Biological Chemistry, 1997, 272, 15057-15060.	1.6	81
108	Cellular signaling roles of TGFÎ², TNFÎ± and Î²APP in brain injury responses and Alzheimer's disease. Brain Research Reviews, 1997, 23, 47-61.	9.1	244

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109	Astroglial overproduction of TGF-Î²1 enhances inflammatory central nervous system disease in transgenic mice. Journal of Neuroimmunology, 1997, 77, 45-50.	1.1	148
110	Amyloidogenic role of cytokine TGF-Î²1 in transgenic mice and in Alzheimer's disease. Nature, 1997, 389, 603-606.	13.7	408
111	Comparison of Neurodegenerative Pathology in Transgenic Mice Overexpressing V717F Î²-Amyloid Precursor Protein and Alzheimerâ€™s Disease. Journal of Neuroscience, 1996, 16, 5795-5811.	1.7	369
112	Spatial learning deficit in mice expressing human 751-amino acid Î²-amyloid precursor protein. NeuroReport, 1996, 7, 2807-2812.	0.6	59
113	Central Nervous System Expression of HIV-1 Gp120 Activates the Hypothalamic-Pituitary-Adrenal Axis: Evidence for Involvement of NMDA Receptors and Nitric Oxide Synthase. Virology, 1996, 226, 362-373.	1.1	55
114	Prevention of HIV-1 gp120-induced neuronal damage in the central nervous system of transgenic mice by the NMDA receptor antagonist memantine. Brain Research, 1996, 706, 303-307.	1.1	139
115	Neurite Outgrowth on Non-permissive SubstratesIn Vitrois Enhanced by Ectopic Expression of the Neural Adhesion Molecule L1 by Mouse Astrocytes. European Journal of Neuroscience, 1996, 8, 1085-1097.	1.2	40
116	Î²-Secretase Processing of the Î²-Amyloid Precursor Protein in Transgenic Mice Is Efficient in Neurons but Inefficient in Astrocytes. Journal of Biological Chemistry, 1996, 271, 31407-31411.	1.6	85
117	Indicator expression directed by regulatory sequences of the glial fibrillary acidic protein (GFAP) gene: In vivo comparison of distinct GFAP-lacZ transgenes. Glia, 1995, 13, 174-184.	2.5	75
118	Alzheimer-type neuropathology in transgenic mice overexpressing V717F Î²-amyloid precursor protein. Nature, 1995, 373, 523-527.	13.7	2,463
119	Levels and Alternative Splicing of Amyloid Î² Protein Precursor (APP) Transcripts in Brains of APP Transgenic Mice and Humans with Alzheimer's Disease. Journal of Biological Chemistry, 1995, 270, 28257-28267.	1.6	228
120	Neuron-specific expression of a hamster prion protein minigene in transgenic mice induces susceptibility to hamster scrapie agent. Neuron, 1995, 15, 1183-1191.	3.8	149
121	gp120 and neurotoxicity in vivo. Trends in Pharmacological Sciences, 1995, 16, 122.	4.0	18
122	Central nervous system damage produced by expression of the HIV-1 coat protein gpl20 in transgenic mice. Nature, 1994, 367, 188-193.	13.7	685
123	Astrocytes in infectious and immuneâ€mediated diseases of the central nervous system. FASEB Journal, 1993, 7, 1226-1232.	0.2	198
124	Androgen Treatment Reduces Cognitive Deficits in Female apoE4 Transgenic Mice. , 0, , 747-757.		0