## Lennart Mucke

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Alzheimer-type neuropathology in transgenic mice overexpressing V717F β-amyloid precursor protein. Nature, 1995, 373, 523-527.	13.7	2,463
2	High-Level Neuronal Expression of Aβ <sub>1–42</sub> in Wild-Type Human Amyloid Protein Precursor Transgenic Mice: Synaptotoxicity without Plaque Formation. Journal of Neuroscience, 2000, 20, 4050-4058.	1.7	1,759
3	Dopaminergic Loss and Inclusion Body Formation in -Synuclein Mice: Implications for Neurodegenerative Disorders. Science, 2000, 287, 1265-1269.	6.0	1,691
4	Reducing Endogenous Tau Ameliorates Amyloid Â-Induced Deficits in an Alzheimer's Disease Mouse Model. Science, 2007, 316, 750-754.	6.0	1,684
5	Alzheimer Mechanisms and Therapeutic Strategies. Cell, 2012, 148, 1204-1222.	13.5	1,548
6	Amyloid-β–induced neuronal dysfunction in Alzheimer's disease: from synapses toward neural networks. Nature Neuroscience, 2010, 13, 812-818.	7.1	1,390
7	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
8	Inflammation in Neurodegenerative Disease—A Double-Edged Sword. Neuron, 2002, 35, 419-432.	3.8	1,075
9	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
10	Inhibitory Interneuron Deficit Links Altered Network Activity and Cognitive Dysfunction in Alzheimer Model. Cell, 2012, 149, 708-721.	13.5	934
11	Neurotoxicity of Amyloid Â-Protein: Synaptic and Network Dysfunction. Cold Spring Harbor Perspectives in Medicine, 2012, 2, a006338-a006338.	2.9	844
12	The Many Faces of Tau. Neuron, 2011, 70, 410-426.	3.8	734
13	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
14	Network abnormalities and interneuron dysfunction in Alzheimer disease. Nature Reviews Neuroscience, 2016, 17, 777-792.	4.9	685
15	SIRT1 Protects against Microglia-dependent Amyloid-β Toxicity through Inhibiting NF-κB Signaling. Journal of Biological Chemistry, 2005, 280, 40364-40374.	1.6	677
16	Amyloid-β/Fyn–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
17	Epilepsy and Cognitive Impairments in Alzheimer Disease. Archives of Neurology, 2009, 66, 435.	4.9	581
18	TGF-β1 promotes microglial amyloid-β clearance and reduces plaque burden in transgenic mice. Nature Medicine, 2001, 7, 612-618.	15.2	575

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19	A network dysfunction perspective on neurodegenerative diseases. Nature, 2006, 443, 768-773.	13.7	566
20	Seizures and Epileptiform Activity in the Early Stages of Alzheimer Disease. JAMA Neurology, 2013, 70, 1158.	4.5	566
21	Fulminant Jejuno-Ileitis following Ablation of Enteric Glia in Adult Transgenic Mice. Cell, 1998, 93, 189-201.	13.5	530
22	Levetiracetam suppresses neuronal network dysfunction and reverses synaptic and cognitive deficits in an Alzheimer's disease model. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2895-903.	3.3	528
23	100 Years and Counting: Prospects for Defeating Alzheimer's Disease. Science, 2006, 314, 781-784.	6.0	505
24	Tau Reduction Prevents AÎ <sup>2</sup> -Induced Defects in Axonal Transport. Science, 2010, 330, 198-198.	6.0	436
25	Amyloidogenic role of cytokine TGF-β1 in transgenic mice and in Alzheimer's disease. Nature, 1997, 389, 603-606.	13.7	408
26	Physiologic brain activity causes DNA double-strand breaks in neurons, with exacerbation by amyloid-β. Nature Neuroscience, 2013, 16, 613-621.	7.1	397
27	Tau post-translational modifications in wild-type and human amyloid precursor protein transgenic mice. Nature Neuroscience, 2015, 18, 1183-1189.	7.1	377
28	Accelerating Amyloid-β Fibrillization Reduces Oligomer Levels and Functional Deficits in Alzheimer Disease Mouse Models*. Journal of Biological Chemistry, 2007, 282, 23818-23828.	1.6	375
29	Alzheimer's disease. Nature, 2009, 461, 895-897.	13.7	374
30	Incidence and impact of subclinical epileptiform activity in Alzheimer's disease. Annals of Neurology, 2016, 80, 858-870.	2.8	373
31	Reversing EphB2 depletion rescues cognitive functions in Alzheimer model. Nature, 2011, 469, 47-52.	13.7	371
32	Comparison of Neurodegenerative Pathology in Transgenic Mice Overexpressing V717F β-Amyloid Precursor Protein and Alzheimer's Disease. Journal of Neuroscience, 1996, 16, 5795-5811.	1.7	369
33	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
34	Antiamyloidogenic and Neuroprotective Functions of Cathepsin B: Implications for Alzheimer's Disease. Neuron, 2006, 51, 703-714.	3.8	362
35	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
36	Expression of Human Apolipoprotein E3 or E4 in the Brains of <i>Apoe<sup>â^'/â^'</sup></i> Mice: Isoform-Specific Effects on Neurodegeneration. Journal of Neuroscience, 1999, 19, 4867-4880.	1.7	334

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37	Phospholipase A2 reduction ameliorates cognitive deficits in a mouse model of Alzheimer's disease. Nature Neuroscience, 2008, 11, 1311-1318.	7.1	314
38	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
39	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
40	Deficiency in neuronal TGF-β signaling promotes neurodegeneration and Alzheimer's pathology. Journal of Clinical Investigation, 2006, 116, 3060-3069.	3.9	302
41	Transsynaptic Progression of Amyloid-β-Induced Neuronal Dysfunction within the Entorhinal-Hippocampal Network. Neuron, 2010, 68, 428-441.	3.8	279
42	Fibrinogen Induces Microglia-Mediated Spine Elimination and Cognitive Impairment in an Alzheimer's Disease Model. Neuron, 2019, 101, 1099-1108.e6.	3.8	252
43	Cellular signaling roles of TCFβ, TNFα and βAPP in brain injury responses and Alzheimer's disease. Brain Research Reviews, 1997, 23, 47-61.	9.1	244
44	Life Extension Factor Klotho Enhances Cognition. Cell Reports, 2014, 7, 1065-1076.	2.9	243
45	Levels and Alternative Splicing of Amyloid β 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
46	Chronic Overproduction of Transforming Growth Factor-β1 by Astrocytes Promotes Alzheimer's Disease-Like Microvascular Degeneration in Transgenic Mice. American Journal of Pathology, 2000, 156, 139-150.	1.9	226
47	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
48	Astrocytic adenosine receptor A2A and Gs-coupled signaling regulate memory. Nature Neuroscience, 2015, 18, 423-434.	7.1	221
49	Apolipoprotein E and cognitive performance. Nature, 2000, 404, 352-354.	13.7	219
50	Astrocytes in infectious and immuneâ€mediated diseases of the central nervous system. FASEB Journal, 1993, 7, 1226-1232.	0.2	198
51	Progranulin protects against amyloid $\hat{l}^2$ deposition and toxicity in Alzheimer's disease mouse models. Nature Medicine, 2014, 20, 1157-1164.	15.2	195
52	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
53	Modulation of Alzheimer-Like Synaptic and Cholinergic Deficits in Transgenic Mice by Human Apolipoprotein E Depends on Isoform , Aging, and Overexpression of Amyloid β Peptides But Not on Plaque Formation. Journal of Neuroscience, 2002, 22, 10539-10548.	1.7	172
54	Androgens Protect against Apolipoprotein E4-Induced Cognitive Deficits. Journal of Neuroscience, 2002, 22, 5204-5209.	1.7	171

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55	Nav1.1-Overexpressing Interneuron Transplants Restore Brain Rhythms and Cognition in a Mouse Model of Alzheimer's Disease. Neuron, 2018, 98, 75-89.e5.	3.8	169
56	Paths of Convergence: Sirtuins in Aging and Neurodegeneration. Neuron, 2008, 58, 10-14.	3.8	164
57	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
58	Life Extension Factor Klotho Prevents Mortality and Enhances Cognition in hAPP Transgenic Mice. Journal of Neuroscience, 2015, 35, 2358-2371.	1.7	157
59	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
60	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
61	Fibrin-targeting immunotherapy protects against neuroinflammation and neurodegeneration. Nature Immunology, 2018, 19, 1212-1223.	7.0	149
62	Astroglial overproduction of TGF-β1 enhances inflammatory central nervous system disease in transgenic mice. Journal of Neuroimmunology, 1997, 77, 45-50.	1.1	148
63	Early neuronal accumulation of DNA double strand breaks in Alzheimer's disease. Acta Neuropathologica Communications, 2019, 7, 77.	2.4	145
64	DNA repair factor BRCA1 depletion occurs in Alzheimer brains and impairs cognitive function in mice. Nature Communications, 2015, 6, 8897.	5.8	143
65	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
66	Neprilysin Overexpression Inhibits Plaque Formation But Fails to Reduce Pathogenic AÎ <sup>2</sup> Oligomers and Associated Cognitive Deficits in Human Amyloid Precursor Protein Transgenic Mice. Journal of Neuroscience, 2009, 29, 1977-1986.	1.7	139
67	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
68	Synaptic Depression and Aberrant Excitatory Network Activity in Alzheimer's Disease: Two Faces of the Same Coin?. NeuroMolecular Medicine, 2010, 12, 48-55.	1.8	138
69	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
70	Tau: Enabler of diverse brain disorders and target of rapidly evolving therapeutic strategies. Science, 2021, 371, .	6.0	133
71	Collagen VI protects neurons against AÎ <sup>2</sup> toxicity. Nature Neuroscience, 2009, 12, 119-121.	7.1	129
72	Tau reduction prevents Aβ-induced axonal transport deficits by blocking activation of GSK3β. Journal of Cell Biology, 2015, 209, 419-433.	2.3	126

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73	Astroglial Expression of Human α1-Antichymotrypsin Enhances Alzheimer-like Pathology in Amyloid Protein Precursor Transgenic Mice. American Journal of Pathology, 2000, 157, 2003-2010.	1.9	125
74	Aggressive amyloidosis in mice expressing human amyloid peptides with the Arctic mutation. Nature Medicine, 2004, 10, 1190-1192.	15.2	125
75	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
76	Hypothalamic–Pituitary–Adrenal Dysfunction in <i>Apoe</i> <sup>â^'/â^'</sup> Mice: Possible Role in Behavioral and Metabolic Alterations. Journal of Neuroscience, 2000, 20, 2064-2071.	1.7	119
77	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
78	Tau reduction prevents disease in a mouse model of <scp>D</scp> ravet syndrome. Annals of Neurology, 2014, 76, 443-456.	2.8	117
79	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
80	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
81	Effect of Levetiracetam on Cognition in Patients With Alzheimer Disease With and Without Epileptiform Activity. JAMA Neurology, 2021, 78, 1345.	4.5	109
82	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
83	A second X chromosome contributes to resilience in a mouse model of Alzheimer's disease. Science Translational Medicine, 2020, 12, .	5.8	107
84	Expression of A152T human tau causes ageâ€dependent neuronal dysfunction and loss in transgenic mice. EMBO Reports, 2016, 17, 530-551.	2.0	103
85	Age-appropriate cognition and subtle dopamine-independent motor deficits in aged Tau knockout mice. Neurobiology of Aging, 2013, 34, 1523-1529.	1.5	102
86	Klotho controls the brain–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
87	High Î <sup>2</sup> -Secretase Activity Elicits Neurodegeneration in Transgenic Mice Despite Reductions in Amyloid-Î <sup>2</sup> Levels. Journal of Biological Chemistry, 2005, 280, 32957-32967.	1.6	89
88	β-Secretase Processing of the β-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
89	Corticotropin-releasing Factor and Adrenocorticotrophic Hormone as Potential Central Mediators of OB Effects. Journal of Biological Chemistry, 1997, 272, 15057-15060.	1.6	81
90	Tau Reduction Diminishes Spatial Learning and Memory Deficits after Mild Repetitive Traumatic Brain Injury in Mice. PLoS ONE, 2014, 9, e115765.	1.1	78

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91	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
92	Istradefylline reduces memory deficits in aging mice with amyloid pathology. Neurobiology of Disease, 2018, 110, 29-36.	2.1	75
93	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
94	Quantifying Biomarkers of Cognitive Dysfunction and Neuronal Network Hyperexcitability in Mouse Models of Alzheimer's Disease: Depletion of Calcium-Dependent Proteins and Inhibitory Hippocampal Remodeling. Methods in Molecular Biology, 2010, 670, 245-262.	0.4	67
95	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
96	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
97	Selective targeting of microglia by quantum dots. Journal of Neuroinflammation, 2012, 9, 22.	3.1	64
98	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
99	Tau Reduction Prevents Key Features of Autism in Mouse Models. Neuron, 2020, 106, 421-437.e11.	3.8	60
100	Spatial learning deficit in mice expressing human 751-amino acid β-amyloid precursor protein. NeuroReport, 1996, 7, 2807-2812.	0.6	59
101	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
102	Ibuprofen, inflammation and Alzheimer disease. Nature Medicine, 2000, 6, 973-974.	15.2	54
103	Amyloid Protein Precursor Stimulates Excitatory Amino Acid Transport. Journal of Biological Chemistry, 1998, 273, 12548-12554.	1.6	50
104	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
105	Altered navigational strategy use and visuospatial deficits in hAPP transgenic mice. Neurobiology of Aging, 2008, 29, 253-266.	1.5	46
106	Network dysfunction in <i>α</i> â€synuclein transgenic mice and human Lewy body dementia. Annals of Clinical and Translational Neurology, 2015, 2, 1012-1028.	1.7	46
107	Behavioral and neural network abnormalities in human APP transgenic mice resemble those of App knock-in mice and are modulated by familial Alzheimer's disease mutations but not by inhibition of BACE1. Molecular Neurodegeneration, 2020, 15, 53.	4.4	44
108	Tau reduction affects excitatory and inhibitory neurons differently, reduces excitation/inhibition ratios, and counteracts network hypersynchrony. Cell Reports, 2021, 37, 109855.	2.9	42

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109	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
110	Neuronal levels and sequence of tau modulate the power of brain rhythms. Neurobiology of Disease, 2018, 117, 181-188.	2.1	33
111	Intracellularly generated amyloid-Î <sup>2</sup> 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
112	Increasing the Receptor Tyrosine Kinase EphB2 Prevents Amyloid-β-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
113	Novel role of human CD4 molecule identified in neurodegeneration. Nature Medicine, 1998, 4, 441-446.	15.2	26
114	The mouse as a model for neuropsychiatric drug development. Current Biology, 2018, 28, R909-R914.	1.8	26
115	Long-term potentiation is independent of the C-tail of the GluA1 AMPA receptor subunit. ELife, 2020, 9, .	2.8	25
116	gp120 and neurotoxicity in vivo. Trends in Pharmacological Sciences, 1995, 16, 122.	4.0	18
117	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
118	The integration site of the APP transgene in the J20 mouse model of Alzheimer's disease. Wellcome Open Research, 2017, 2, 84.	0.9	15
119	The integration site of the APP transgene in the J20 mouse model of Alzheimer's disease. Wellcome Open Research, 2017, 2, 84.	0.9	15
120	Interdependence of neural network dysfunction and microglial alterations in Alzheimer's disease-related models. IScience, 2021, 24, 103245.	1.9	11
121	Tau Phosphorylation—Much More than a Biomarker. Neuron, 2016, 92, 265-267.	3.8	8
122	Phenotypic Differences between the Alzheimer's Disease-Related hAPP-J20 Model and Heterozygous <i>Zbtb20</i> Knock-Out Mice. ENeuro, 2021, 8, ENEURO.0089-21.2021.	0.9	8
123	Food for Thought. Neuron, 2004, 43, 596-599.	3.8	2
124	Androgen Treatment Reduces Cognitive Deficits in Female apoE4 Transgenic Mice. , 0, , 747-757.		0

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