Wayne N Frankel

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/10451747/publications.pdf

Version: 2024-02-01

94 papers	16,217 citations	41339 49 h-index	40976 93 g-index
99 all docs	99 docs citations	99 times ranked	18975 citing authors

#	Article	IF	Citations
1	Initial sequencing and comparative analysis of the mouse genome. Nature, 2002, 420, 520-562.	27.8	6,319
2	TRANCE Is a Novel Ligand of the Tumor Necrosis Factor Receptor Family That Activates c-Jun N-terminal Kinase in T Cells. Journal of Biological Chemistry, 1997, 272, 25190-25194.	3.4	943
3	Absence Epilepsy in Tottering Mutant Mice Is Associated with Calcium Channel Defects. Cell, 1996, 87, 607-617.	28.9	722
4	The harlequin mouse mutation downregulates apoptosis-inducing factor. Nature, 2002, 419, 367-374.	27.8	574
5	The mouse stargazer gene encodes a neuronal Ca2+-channel Î³ subunit. Nature Genetics, 1998, 19, 340-347.	21.4	558
6	Disruption of the nuclear hormone receptor RORÎ± in staggerer mice. Nature, 1996, 379, 736-739.	27.8	487
7	An enzymatic cascade of Rab5 effectors regulates phosphoinositide turnover in the endocytic pathway. Journal of Cell Biology, 2005, 170, 607-618.	5.2	354
8	Linkage of Mls genes to endogenous mammary tumour viruses of inbred mice. Nature, 1991, 349, 526-528.	27.8	334
9	Who's afraid of epistasis?. Nature Genetics, 1996, 14, 371-373.	21.4	310
10	Ducky Mouse Phenotype of Epilepsy and Ataxia Is Associated with Mutations in theCacna2d2Gene and Decreased Calcium Channel Current in Cerebellar Purkinje Cells. Journal of Neuroscience, 2001, 21, 6095-6104.	3.6	289
11	Sodium/Hydrogen Exchanger Gene Defect in Slow-Wave Epilepsy Mutant Mice. Cell, 1997, 91, 139-148.	28.9	260
12	KICSTOR recruits GATOR1 to the lysosome and is necessary for nutrients to regulate mTORC1. Nature, 2017, 543, 438-442.	27.8	229
13	The roads from phenotypic variation to gene discovery: mutagenesis versus QTLs. Nature Genetics, 2000, 25, 381-384.	21.4	202
14	The genomic landscape shaped by selection on transposable elements across 18 mouse strains. Genome Biology, 2012, 13, R45.	9.6	170
15	A new mode of corticothalamic transmission revealed in the Gria4â^'/â^' model of absence epilepsy. Nature Neuroscience, 2011, 14, 1167-1173.	14.8	159
16	Altered Calcium Channel Currents in Purkinje Cells of the Neurological Mutant Mouseleaner. Journal of Neuroscience, 1998, 18, 4482-4489.	3.6	156
17	Gait analysis detects early changes in transgenic SOD1(G93A) mice. Muscle and Nerve, 2005, 32, 43-50.	2.2	155
18	The Muscular Dystrophy with Myositis (mdm) Mouse Mutation Disrupts a Skeletal Muscle-Specific Domain of Titin. Genomics, 2002, 79, 146-149.	2.9	142

#	Article	IF	Citations
19	Functional Annotation of Mouse Genome Sequences. Science, 2001, 291, 1251-1255.	12.6	125
20	Multifactorial inheritance of neural tube defects: localization of the major gene and recognition of modifiers in ct mutant mice. Nature Genetics, 1994, 6, 357-362.	21.4	119
21	Identification of the Mouse Neuromuscular Degeneration Gene and Mapping of a Second Site Suppressor Allele. Neuron, 1998, 21, 1327-1337.	8.1	117
22	Taking stock of complex trait genetics in mice. Trends in Genetics, 1995, 11, 471-477.	6.7	116
23	Electroconvulsive Thresholds of Inbred Mouse Strains. Genomics, 2001, 74, 306-312.	2.9	116
24	Biochemical and Biophysical Evidence for Î³2 Subunit Association with Neuronal Voltage-activated Ca2+Channels. Journal of Biological Chemistry, 2001, 276, 32917-32924.	3.4	110
25	Heterozygous mutations of the voltage-gated sodium channel SCN8A are associated with spike-wave discharges and absence epilepsy in mice. Human Molecular Genetics, 2009, 18, 1633-1641.	2.9	110
26	Cloning, mRNA Expression, and Chromosomal Mapping of Mouse and Human Preprocortistatin. Genomics, 1997, 42, 499-506.	2.9	107
27	CELF4 Regulates Translation and Local Abundance of a Vast Set of mRNAs, Including Genes Associated with Regulation of Synaptic Function. PLoS Genetics, 2012, 8, e1003067.	3.5	106
28	Loss of MeCP2 From Forebrain Excitatory Neurons Leads to Cortical Hyperexcitation and Seizures. Journal of Neuroscience, 2014, 34, 2754-2763.	3.6	106
29	A Rostrocaudal Muscular Dystrophy Caused by a Defect in Choline Kinase Beta, the First Enzyme in Phosphatidylcholine Biosynthesis. Journal of Biological Chemistry, 2006, 281, 4938-4948.	3.4	102
30	Isotype switching of an immunoglobulin heavy chain transgene occurs by DNA recombination between different chromosomes. Cell, 1990, 63, 537-548.	28.9	99
31	The mouse fidgetin gene defines a new role for AAA family proteins in mammalian development. Nature Genetics, 2000, 26, 198-202.	21.4	98
32	A Missense Mutation in a Highly Conserved Alternate Exon of Dynamin-1 Causes Epilepsy in Fitful Mice. PLoS Genetics, 2010, 6, e1001046.	3.5	89
33	Mutation Rate and Predicted Phenotypic Target Sizes in Ethylnitrosourea-Treated Mice. Genetics, 2004, 168, 953-959.	2.9	82
34	A Null Mutation in Inositol Polyphosphate 4-Phosphatase Type I Causes Selective Neuronal Loss in Weeble Mutant Mice. Neuron, 2001, 32, 203-212.	8.1	81
35	Implementing Large-Scale ENU Mutagenesis Screens in North America. Genetica, 2004, 122, 51-64.	1.1	81
36	Absence seizures in C3H/HeJ and knockout mice caused by mutation of the AMPA receptor subunit Gria4. Human Molecular Genetics, 2008, 17, 1738-1749.	2.9	78

#	Article	IF	Citations
37	Neuronal voltage-gated ion channels are genetic modifiers of generalized epilepsy with febrile seizures plus. Neurobiology of Disease, 2011, 41, 655-660.	4.4	78
38	A mutation in the Ter gene causing increased susceptibility to testicular teratomas maps to mouse chromosome 18. Nature Genetics, 1994, 6, 363-368.	21.4	77
39	Large-scale mutagenesis of the mouse to understand the genetic bases of nervous system structure and function. Molecular Brain Research, 2004, 132, 105-115.	2.3	77
40	A Spontaneous Mutation Involving Kcnq2 (Kv7.2) Reduces M-Current Density and Spike Frequency Adaptation in Mouse CA1 Neurons. Journal of Neuroscience, 2006, 26, 2053-2059.	3.6	77
41	The AXB and BXA set of recombinant inbred mouse strains. Mammalian Genome, 1992, 3, 669-680.	2.2	70
42	Genetics of complex neurological disease: challenges and opportunities for modeling epilepsy in mice and rats. Trends in Genetics, 2009, 25, 361-367.	6.7	70
43	Severe epilepsy resulting from genetic interaction between Scn2a and Kcnq2. Human Molecular Genetics, 2006, 15, 1043-1048.	2.9	67
44	A Curly-Tail Modifier Locus,mct1,on Mouse Chromosome 17. Genomics, 1995, 29, 719-724.	2.9	61
45	Complex Seizure Disorder Caused by Brunol4 Deficiency in Mice. PLoS Genetics, 2007, 3, e124.	3.5	61
46	Antiepileptic activity of preferential inhibitors of persistent sodium current. Epilepsia, 2014, 55, 1274-1283.	5.1	60
47	Mapping of the motor neuron degeneration (Mnd) gene, a mouse model of amyotrophic lateral sclerosis (ALS). Genomics, 1992, 13, 797-802.	2.9	59
48	A novel Akt3 mutation associated with enhanced kinase activity and seizure susceptibility in mice. Human Molecular Genetics, 2011, 20, 988-999.	2.9	58
49	Spontaneous deletion of epilepsy gene orthologs in a mutant mouse with a low electroconvulsive threshold. Human Molecular Genetics, 2003, 12, 975-984.	2.9	53
50	Modelling and treating GRIN2A developmental and epileptic encephalopathy in mice. Brain, 2020, 143, 2039-2057.	7.6	51
51	Modes and Regulation of Endocytic Membrane Retrieval in Mouse Auditory Hair Cells. Journal of Neuroscience, 2014, 34, 705-716.	3.6	46
52	Epileptic encephalopathy-causing mutations in DNM1 impair synaptic vesicle endocytosis. Neurology: Genetics, 2015, 1, e4.	1.9	46
53	Genetics of Endogenous Murine Leukemia Viruses. Annals of the New York Academy of Sciences, 1989, 567, 39-49.	3.8	44
54	Genetic and Physical Maps of the Stargazer Locus on Mouse Chromosome 15. Genomics, 1997, 43, 62-68.	2.9	43

#	Article	IF	Citations
55	Reduced GABAergic Neuron Excitability, Altered Synaptic Connectivity, and Seizures in a KCNT1 Gain-of-Function Mouse Model of Childhood Epilepsy. Cell Reports, 2020, 33, 108303.	6.4	41
56	Characterization of the endogenous nonecotropic murine leukemia viruses of NZB/BINJ and SM/J inbred strains. Mammalian Genome, 1992, 2, 110-122.	2.2	39
57	Detecting genes in new and old mouse models for epilepsy: a prospectus through the magnifying glass. Epilepsy Research, 1999, 36, 97-110.	1.6	39
58	Mice Carrying the Szt1 Mutation Exhibit Increased Seizure Susceptibility and Altered Sensitivity to Compounds Acting at the M-Channel. Epilepsia, 2004, 45, 1009-1016.	5.1	39
59	Expression of the Neuronal tRNA n-Tr20 Regulates Synaptic Transmission and Seizure Susceptibility. Neuron, 2020, 108, 193-208.e9.	8.1	38
60	A targeted mutation in Cacng4 exacerbates spike-wave seizures in stargazer (Cacng2) mice. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2123-2128.	7.1	35
61	Inhibition of microRNA 128 promotes excitability of cultured cortical neuronal networks. Genome Research, 2016, 26, 1411-1416.	5.5	34
62	Aberrant sodium channel activity in the complex seizure disorder of Celf4 mutant mice. Journal of Physiology, 2013, 591, 241-255.	2.9	33
63	Moving forward with chemical mutagenesis in the mouse. Journal of Physiology, 2004, 554, 13-21.	2.9	32
64	Development of a New Genetic Model for Absence Epilepsy: Spike-Wave Seizures in C3H/He and Backcross Mice. Journal of Neuroscience, 2005, 25, 3452-3458.	3.6	31
65	Functional characterization of fidgetin, an AAA-family protein mutated in fidget mice. Experimental Cell Research, 2005, 304, 50-58.	2.6	31
66	Independent Neuronal Origin of Seizures and Behavioral Comorbidities in an Animal Model of a Severe Childhood Genetic Epileptic Encephalopathy. PLoS Genetics, 2015, 11, e1005347.	3.5	31
67	Genomic mapping of intracisternal A-particle proviral elements. Mammalian Genome, 1993, 4, 69-77.	2.2	29
68	Mouse Strain Backgrounds: More Than Black and White. Neuron, 1998, 20, 183.	8.1	29
69	Of Mice and Genome Sequence. Cell, 2001, 107, 13-16.	28.9	29
70	Interaction between Fidgetin and Protein Kinase A-anchoring Protein AKAP95 Is Critical for Palatogenesis in the Mouse. Journal of Biological Chemistry, 2006, 281, 22352-22359.	3.4	28
71	Phenotypic heterogeneity in the stargazin allelic series. Mammalian Genome, 2003, 14, 506-513.	2.2	27
72	DBA/2J Genetic Background Exacerbates Spontaneous Lethal Seizures but Lessens Amyloid Deposition in a Mouse Model of Alzheimerâ€™s Disease. PLoS ONE, 2015, 10, e0125897.	2.5	27

#	Article	IF	Citations
73	Genetic Approaches to Studying Mouse Models of Human Seizure Disorders. Advances in Experimental Medicine and Biology, 2004, 548, 1-11.	1.6	26
74	ElevatedId2Expression Results in Precocious Neural Stem Cell Depletion and Abnormal Brain Development. Stem Cells, 2013, 31, 1010-1021.	3.2	25
75	Multiple Seizure Susceptibility Genes on Chromosome 7 in SWXL-4 Congenic Mouse Strains. Genomics, 2000, 70, 62-65.	2.9	24
76	Dynamin 1 isoform roles in a mouse model of severe childhood epileptic encephalopathy. Neurobiology of Disease, 2016, 95, 1-11.	4.4	24
77	Three ENU-induced neurological mutations in the pore loopof sodium channel Scn8a (Na v 1.6) and a genetically linkedretinal mutation, rd13. Mammalian Genome, 2004, 15, 344-351.	2.2	23
78	meaRtools: An R package for the analysis of neuronal networks recorded on microelectrode arrays. PLoS Computational Biology, 2018, 14, e1006506.	3.2	22
79	Unraveling Genetic Modifiers in the Gria4 Mouse Model of Absence Epilepsy. PLoS Genetics, 2014, 10, e1004454.	3.5	19
80	Altered excitatory transmission onto hippocampal interneurons in the IQSEC2 mouse model of X-linked neurodevelopmental disease. Neurobiology of Disease, 2020, 137, 104758.	4.4	19
81	Overlaps, gaps, and complexities of mouse models of Developmental and Epileptic Encephalopathy. Neurobiology of Disease, 2021, 148, 105220.	4.4	18
82	An early endothelial cellâ€“specific requirement for Glut1 is revealed in Glut1 deficiency syndrome model mice. JCI Insight, 2021, 6, .	5.0	17
83	Genetic and phenotypic analysis of seizure susceptibility in PL/J mice. Mammalian Genome, 2004, 15, 698-703.	2.2	15
84	RNAi-Based Gene Therapy Rescues Developmental and Epileptic Encephalopathy in a Genetic Mouse Model. Molecular Therapy, 2020, 28, 1706-1716.	8.2	15
85	A genome end-game: understanding gene function in the nervous system. Nature Neuroscience, 2004, 7, 484-485.	14.8	9
86	Epilepsy Benchmarks Area II: Prevent Epilepsy and Its Progression. Epilepsy Currents, 2020, 20, 14S-22S.	0.8	9
87	Sulfated glycoprotein-2 (Sgp-2) maps to mouse Chromosome 14. Mammalian Genome, 1993, 4, 131-132.	2.2	8
88	A Targeted Deleterious Allele of the Splicing Factor SCNM1 in the Mouse. Genetics, 2008, 180, 1419-1427.	2.9	8
89	PRAS: Predicting functional targets of RNA binding proteins based on CLIP-seq peaks. PLoS Computational Biology, 2019, 15, e1007227.	3.2	8
90	Arfgef1 haploinsufficiency in mice alters neuronal endosome composition and decreases membrane surface postsynaptic GABAA receptors. Neurobiology of Disease, 2020, 134, 104632.	4.4	8

#	Article	IF	Citations
91	Mouse Chromosome 10. Mammalian Genome, 1992, 3, S153-S161.	2.2	7
92	Single unit analysis and wide-field imaging reveal alterations in excitatory and inhibitory neurons in glioma. Brain, 2022, 145, 3666-3680.	7.6	5
93	Altered Fast Synaptic Transmission in a Mouse Model of DNM1-Associated Developmental Epileptic Encephalopathy. ENeuro, 2021, 8, ENEURO.0269-20.2020.	1.9	4
94	Chapter 2.1.1 Mapping single locus mutations in mice: towards gene identification of neurological traits. Handbook of Behavioral Neuroscience, 1999, 13, 61-81.	0.0	0