Matthias Klugmann

List of Publications by Year
in descending order

90 papers	8,598 citations	71102 41 h-index	56724 83 g-index
92 all docs	92 docs citations	92 times ranked	11153 citing authors

#	Article	IF	Citations
1	Editorial: Myelin Repair: At the Crossing-Lines of Myelin Biology and Gene Therapy. Frontiers in Cellular Neuroscience, 2022, 16, 853742.	3.7	0
2	Developmental delay and late onset HBSL pathology in hypomorphic Dars1M256L mice. Neurochemical Research, 2022, 47, 1972-1984.	3.3	4
3	AAV9-mediated gene delivery of MCT1 to oligodendrocytes does not provide a therapeutic benefit in a mouse model of ALS. Molecular Therapy - Methods and Clinical Development, 2021, 20, 508-519.	4.1	12
4	L-Aspartate, L-Ornithine and L-Ornithine-L-Aspartate (LOLA) and Their Impact on Brain Energy Metabolism. Neurochemical Research, 2020, 45, 1438-1450.	3.3	13
5	The Leukodystrophies HBSL and LBSLâ€"Correlates and Distinctions. Frontiers in Cellular Neuroscience, 2020, 14, 626610.	3.7	9
6	A Hypomorphic Dars1D367Y Model Recapitulates Key Aspects of the Leukodystrophy HBSL. Frontiers in Cellular Neuroscience, 2020, 14, 625879.	3.7	6
7	Neurotrophin gene augmentation by electrotransfer to improve cochlear implant hearing outcomes. Hearing Research, 2019, 380, 137-149.	2.0	20
8	Adenoâ€associated virusâ€based Alzheimer's disease mouse models and potential new therapeutic avenues. British Journal of Pharmacology, 2019, 176, 3649-3665.	5.4	22
9	Increased Alcohol-Drinking Induced by Manipulations of mGlu5 Phosphorylation within the Bed Nucleus of the Stria Terminalis. Journal of Neuroscience, 2019, 39, 2745-2761.	3.6	25
10	Dual-Plasmid Bionic Array-Directed Gene Electrotransfer in HEK293 Cells and Cochlear Mesenchymal Cells Probes Transgene Expression and Cell Fate. Human Gene Therapy, 2019, 30, 211-224.	2.7	11
11	Gene therapy mediated seizure suppression in Genetic Generalised Epilepsy: Neuropeptide Y overexpression in a rat model. Neurobiology of Disease, 2018, 113, 23-32.	4.4	14
12	Targeted overexpression of CRH receptor subtype 1 in central amygdala neurons: effect on alcohol-seeking behavior. Psychopharmacology, 2018, 235, 1821-1833.	3.1	15
13	Uncoupling N-acetylaspartate from brain pathology: implications for Canavan disease gene therapy. Acta Neuropathologica, 2018, 135, 95-113.	7.7	38
14	Expression Pattern of the Aspartyl-tRNA Synthetase DARS in the Human Brain. Frontiers in Molecular Neuroscience, 2018, 11, 81.	2.9	19
15	In vivo characterization of the aspartyl-tRNA synthetase DARS: Homing in on the leukodystrophy HBSL. Neurobiology of Disease, 2017, 97, 24-35.	4.4	20
16	Gene therapy targeting oligodendrocytes provides therapeutic benefit in a leukodystrophy model. Brain, 2017, 140, aww351.	7.6	33
17	Viralâ€mediated oligodendroglial alphaâ€synuclein expression models multiple system atrophy. Movement Disorders, 2017, 32, 1230-1239.	3.9	35
18	Acetate metabolism does not reflect astrocytic activity, contributes directly to <scp>GABA</scp> synthesis, and is increased by silent information regulator 1 activation. Journal of Neurochemistry, 2017, 140, 903-918.	3.9	28

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19	Tau exacerbates excitotoxic brain damage in an animal model of stroke. Nature Communications, 2017, 8, 473.	12.8	134
20	Methamphetamine Addiction Vulnerability: The Glutamate, the Bad, and the Ugly. Biological Psychiatry, 2017, 81, 959-970.	1.3	57
21	Behavioral and Neurochemical Phenotyping of Mice Incapable of Homer1a Induction. Frontiers in Behavioral Neuroscience, 2017, 11, 208.	2.0	15
22	Cochlear Implant Close-Field Electroporation. , 2017, , 1679-1697.		0
23	Recombinant Human Myelin-Associated Glycoprotein Promoter Drives Selective AAV-Mediated Transgene Expression in Oligodendrocytes. Frontiers in Molecular Neuroscience, 2016, 9, 13.	2.9	39
24	Mapping of bionic array electric field focusing in plasmid DNA-based gene electrotransfer. Gene Therapy, 2016, 23, 369-379.	4.5	11
25	Impaired 2-AG Signaling in Hippocampal Glutamatergic Neurons: Aggravation of Anxiety-Like Behavior and Unaltered Seizure Susceptibility. International Journal of Neuropsychopharmacology, 2016, 19, pyv091.	2.1	33
26	Cannabinoid receptor-interacting protein Crip1a modulates CB1 receptor signaling in mouse hippocampus. Brain Structure and Function, 2016, 221, 2061-2074.	2.3	33
27	Cochlear Implant Close-Field Electroporation. , 2016, , 1-20.		5
28	Septal Glucagon-Like Peptide 1 Receptor Expression Determines Suppression of Cocaine-Induced Behavior. Neuropsychopharmacology, 2015, 40, 1969-1978.	5.4	67
29	Silent information regulator 1 modulator resveratrol increases brain lactate production and inhibits mitochondrial metabolism, whereas SRT1720 increases oxidative metabolism. Journal of Neuroscience Research, 2015, 93, 1147-1156.	2.9	19
30	Type II spiral ganglion afferent neurons drive medial olivocochlear reflex suppression of the cochlear amplifier. Nature Communications, 2015, 6, 7115.	12.8	60
31	Cocaine-elicited imbalances in ventromedial prefrontal cortex Homer1 versus Homer2 expression: implications for relapse. Addiction Biology, 2015, 20, 148-157.	2.6	21
32	Homer2 within the nucleus accumbens core bidirectionally regulates alcohol intake by both P and Wistar rats. Alcohol, 2015, 49, 533-542.	1.7	11
33	Loss of Central Auditory Processing in a Mouse Model of Canavan Disease. PLoS ONE, 2014, 9, e97374.	2.5	6
34	Binge Alcohol Drinking by Mice Requires Intact Group1 Metabotropic Glutamate Receptor Signaling Within the Central Nucleus of the Amygdale. Neuropsychopharmacology, 2014, 39, 435-444.	5.4	67
35	An Immunological Approach to Increase the Brainâ€™s Resilience to Insults. ISRN Neuroscience, 2014, 2014, 1-10.	1.5	13
36	Close-Field Electroporation Gene Delivery Using the Cochlear Implant Electrode Array Enhances the Bionic Ear. Science Translational Medicine, 2014, 6, 233ra54.	12.4	130

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37	<scp>KIBRA</scp> (KIdney/BRAin protein) regulates learning and memory and stabilizes Protein kinase MÎ¶. Journal of Neurochemistry, 2014, 128, 686-700.	3.9	64
38	GluA1 and its PDZ-interaction: A role in experience-dependent behavioral plasticity in the forced swim test. Neurobiology of Disease, 2013, 52, 160-167.	4.4	19
39	Neurotransmitter-Triggered Transfer of Exosomes Mediates Oligodendrocyteâ€“Neuron Communication. PLoS Biology, 2013, 11, e1001604.	5.6	663
40	A single gene defect causing claustrophobia. Translational Psychiatry, 2013, 3, e254-e254.	4.8	41
41	Imbalances in Prefrontal Cortex CC-Homer1 versus CC-Homer2 Expression Promote Cocaine Preference. Journal of Neuroscience, 2013, 33, 8101-8113.	3.6	45
42	Glial Promoter Selectivity following AAV-Delivery to the Immature Brain. PLoS ONE, 2013, 8, e65646.	2.5	108
43	Homers at the Interface between Reward and Pain. Frontiers in Psychiatry, 2013, 4, 39.	2.6	10
44	Alternative Splicing of the TRPC3 Ion Channel Calmodulin/IP₃Receptor-Binding Domain in the Hindbrain Enhances Cation Flux. Journal of Neuroscience, 2012, 32, 11414-11423.	3.6	34
45	Volatile meets versatile. Critical Care Medicine, 2012, 40, 1992-1993.	0.9	0
46	Nucleus Accumbens m<scp>G</scp>lu<scp>R</scp>5â€Associated Signaling Regulates Binge Alcohol Drinking Under Drinkingâ€inâ€theâ€Dark Procedures. Alcoholism: Clinical and Experimental Research, 2012, 36, 1623-1633.	2.4	102
47	Mitochondrial CB1 receptors regulate neuronal energy metabolism. Nature Neuroscience, 2012, 15, 558-564.	14.8	450
48	AAV-Mediated Overexpression of the CB1 Receptor in the mPFC of Adult Rats Alters Cognitive Flexibility, Social Behavior, and Emotional Reactivity. Frontiers in Behavioral Neuroscience, 2011, 5, 37.	2.0	35
49	Cannabinoid exposure in pubertal rats increases spontaneous ethanol consumption and NMDA receptor associated protein levels. International Journal of Neuropsychopharmacology, 2011, 14, 505-517.	2.1	33
50	Accumbens Homer2-mediated signaling: a factor contributing to mouse strain differences in alcohol drinking?. Genes, Brain and Behavior, 2011, 10, 111-126.	2.2	42
51	CNS-targeted Viral Delivery of G-CSF in an Animal Model for ALS: Improved Efficacy and Preservation of the Neuromuscular Unit. Molecular Therapy, 2011, 19, 284-292.	8.2	61
52	Nerve Terminal Nicotinic Acetylcholine Receptors Initiate Quantal GABA Release from Perisomatic Interneurons by Activating Axonal T-Type (Ca_v3) Ca²⁺Channels and Ca²⁺Release from Stores. Journal of Neuroscience, 2011, 31, 13546-13561.	3.6	84
53	Aspartoacylase-LacZ Knockin Mice: An Engineered Model of Canavan Disease. PLoS ONE, 2011, 6, e20336.	2.5	41
54	Optogenetic Release of ACh Induces Rhythmic Bursts of Perisomatic IPSCs in Hippocampus. PLoS ONE, 2011, 6, e27691.	2.5	48

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55	Semaphorin 6A Improves Functional Recovery in Conjunction with Motor Training after Cerebral Ischemia. PLoS ONE, 2010, 5, e10737.	2.5	11
56	Extinction Training after Cocaine Self-Administration Induces Glutamatergic Plasticity to Inhibit Cocaine Seeking. Journal of Neuroscience, 2010, 30, 7984-7992.	3.6	187
57	Synaptic Inhibition in the Olfactory Bulb Accelerates Odor Discrimination in Mice. Neuron, 2010, 65, 399-411.	8.1	223
58	AAV Vector-Mediated Overexpression of CB1 Cannabinoid Receptor in Pyramidal Neurons of the Hippocampus Protects against Seizure-Induced Excitoxicity. PLoS ONE, 2010, 5, e15707.	2.5	75
59	Binge Drinking Upregulates Accumbens mGluR5-Homer2-PI3K Signaling: Functional Implications for Alcoholism. Journal of Neuroscience, 2009, 29, 8655-8668.	3.6	141
60	Rapid, reproducible transduction of select forebrain regions by targeted recombinant virus injection into the neonatal mouse brain. Journal of Neuroscience Methods, 2009, 182, 55-63.	2.5	57
61	Loss of the Ca ²⁺ /calmodulin-dependent protein kinase type IV in dopaminoceptive neurons enhances behavioral effects of cocaine. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17549-17554.	7.1	36
62	Accumbens Homer2 Overexpression Facilitates Alcohol-Induced Neuroplasticity in C57BL/6J Mice. Neuropsychopharmacology, 2008, 33, 1365-1378.	5.4	101
63	AAV Vectorâ€“mediated RNAi of Mutant Huntingtin Expression Is Neuroprotective in a Novel Genetic Rat Model of Huntington's Disease. Molecular Therapy, 2008, 16, 947-956.	8.2	135
64	Targeting Homer genes using adeno-associated viral vector: lessons learned from behavioural and neurochemical studies. Behavioural Pharmacology, 2008, 19, 485-500.	1.7	30
65	NAC1 Regulates the Recruitment of the Proteasome Complex into Dendritic Spines. Journal of Neuroscience, 2007, 27, 8903-8913.	3.6	51
66	A novel role of circadian transcription factor DBP in hippocampal plasticity. Molecular and Cellular Neurosciences, 2006, 31, 303-314.	2.2	32
67	The Endocannabinoid System Controls Key Epileptogenic Circuits in the Hippocampus. Neuron, 2006, 51, 455-466.	8.1	632
68	Synaptic scaffolding protein Homer1a protects against chronic inflammatory pain. Nature Medicine, 2006, 12, 677-681.	30.7	123
69	Homer Isoforms Differentially Regulate Cocaine-Induced Neuroplasticity. Neuropsychopharmacology, 2006, 31, 768-777.	5.4	78
70	Activity-dependent subcellular localization of NAC1, dendrites and glia. European Journal of Neuroscience, 2005, 22, 1552-1552.	2.6	0
71	Restoration of aspartoacylase activity in CNS neurons does not ameliorate motor deficits and demyelination in a model of Canavan disease. Molecular Therapy, 2005, 11, 745-753.	8.2	48
72	Distinct Roles for Different Homer1 Isoforms in Behaviors and Associated Prefrontal Cortex Function. Journal of Neuroscience, 2005, 25, 11586-11594.	3.6	108

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73	AAV-mediated hippocampal expression of short and long Homer 1 proteins differentially affect cognition and seizure activity in adult rats. Molecular and Cellular Neurosciences, 2005, 28, 347-360.	2.2	179
74	Homer Proteins Regulate Sensitivity to Cocaine. Neuron, 2004, 43, 401-413.	8.1	226
75	Genetic background determines phenotypic severity of thePlp rumpshaker mutation. Journal of Neuroscience Research, 2003, 72, 12-24.	2.9	47
76	Glucagon-like peptide-1 receptor is involved in learning and neuroprotection. Nature Medicine, 2003, 9, 1173-1179.	30.7	722
77	Identification and distribution of aspartoacylase in the postnatal rat brain. NeuroReport, 2003, 14, 1837-1840.	1.2	46
78	Patients lacking the major CNS myelin protein, proteolipid protein 1, develop length-dependent axonal degeneration in the absence of demyelination and inflammation. Brain, 2002, 125, 551-561.	7.6	272
79	Observations on the structure of myelin lacking the major proteolipid protein. Neuropathology and Applied Neurobiology, 2002, 28, 75-78.	3.2	21
80	Multiple Splice Isoforms of Proteolipid M6B in Neurons and Oligodendrocytes. Molecular and Cellular Neurosciences, 2001, 18, 593-605.	2.2	48
81	Myelin proteolipid proteins promote the interaction of oligodendrocytes and axons. Journal of Neuroscience Research, 2001, 63, 151-164.	2.9	64
82	Shaping of the autoreactive T-cell repertoire by a splice variant of self protein expressed in thymic epithelial cells. Nature Medicine, 2000, 6, 56-61.	30.7	355
83	Reduced Levels of a Specific Myelin-Associated Oligodendrocytic Basic Protein Isoform in shiverer Myelin. Developmental Neuroscience, 1999, 21, 36-42.	2.0	10
84	Distinct phenotypes associated with increasing dosage of the PLP gene: implications for CMT1A due to PMP22 gene duplication. Annals of the New York Academy of Sciences, 1999, 883, 234-46.	3.8	16
85	Mouse Models of Myelin Diseases. Brain Pathology, 1998, 8, 771-793.	4.1	49
86	Late-onset neurodegeneration in mice with increased dosage of the proteolipid protein gene. , 1998, 394, 506-519.		118
87	Current concepts of PLP and its role in the nervous system. Microscopy Research and Technique, 1998, 41, 344-358.	2.2	110
88	Axonal Swellings and Degeneration in Mice Lacking the Major Proteolipid of Myelin. Science, 1998, 280, 1610-1613.	12.6	804
89	Neuronal Basic Helix-Loop-Helix Proteins (NEX, neuroD, NDRF): Spatiotemporal Expression and Targeted Disruption of the NEX Gene in Transgenic Mice. Journal of Neuroscience, 1998, 18, 1408-1418.	3.6	114
90	Assembly of CNS Myelin in the Absence of Proteolipid Protein. Neuron, 1997, 18, 59-70.	8.1	404