Christophe Mulle

List of Publications by Year
in descending order

102 papers	7,907 citations	44069 48 h-index	53230 85 g-index
109 all docs	109 docs citations	109 times ranked	8146 citing authors

#	ARTICLE	IF	CITATIONS
1	The deletion of GluK2 alters cholinergic control of neuronal excitability. Cerebral Cortex, 2022, 32, 2907-2923.	2.9	1
2	APP accumulates with presynaptic proteins around amyloid plaques: A role for presynaptic mechanisms in Alzheimer's disease?. Alzheimer's and Dementia, 2022, 18, 2099-2116.	0.8	21
3	(<i>S</i>)-2-Mercaptohistidine: A First Selective Orthosteric GluK3 Antagonist. ACS Chemical Neuroscience, 2022, 13, 1580-1587.	3.5	2
4	Lighting up preâ€synaptic potentiation. Journal of Neurochemistry, 2021, 156, 270-272.	3.9	2
5	Distinctive alteration of presynaptic proteins in the outer molecular layer of the dentate gyrus in Alzheimerâ€™s disease. Brain Communications, 2021, 3, fcab079.	3.3	7
6	Regulation and dysregulation of neuronal circuits by KARs. Neuropharmacology, 2021, 197, 108699.	4.1	18
7	Vangl2 in the Dentate Network Modulates Pattern Separation and Pattern Completion. Cell Reports, 2020, 31, 107743.	6.4	10
8	Colocalization Colormap â€"an ImageJ Plugin for the Quantification and Visualization of Colocalized Signals. Neuroinformatics, 2020, 18, 661-664.	2.8	16
9	Presynaptic failure in Alzheimer's disease. Progress in Neurobiology, 2020, 194, 101801.	5.7	46
10	Theta Oscillations Coincide with Sustained Hyperpolarization in CA3 Pyramidal Cells, Underlying Decreased Firing. Cell Reports, 2020, 32, 107868.	6.4	13
11	Seizure protein 6 controls glycosylation and trafficking of kainate receptor subunits GluK2 andÂGluK3. EMBO Journal, 2020, 39, e103457.	7.8	20
12	The glutamate receptor GluK2 contributes to the regulation of glucose homeostasis and its deterioration during aging. Molecular Metabolism, 2019, 30, 152-160.	6.5	10
13	Hippocampal Mossy Fibers Synapses in CA3 Pyramidal Cells Are Altered at an Early Stage in a Mouse Model of Alzheimer's Disease. Journal of Neuroscience, 2019, 39, 4193-4205.	3.6	41
14	Activityâ€dependent control of NMDA receptor subunit composition at hippocampal mossy fibre synapses. Journal of Physiology, 2018, 596, 703-716.	2.9	15
15	Presenilin-mediated cleavage of APP regulates synaptotagmin-7 and presynaptic plasticity. Nature Communications, 2018, 9, 4780.	12.8	44
16	CaMKII Metaplasticity Drives AÎ² Oligomer-Mediated Synaptotoxicity. Cell Reports, 2018, 23, 3137-3145.	6.4	61
17	Operation and plasticity of hippocampal CA3 circuits: implications for memory encoding. Nature Reviews Neuroscience, 2017, 18, 208-220.	10.2	147
18	Metabotropic action of postsynaptic kainate receptors triggers hippocampal long-term potentiation. Nature Neuroscience, 2017, 20, 529-539.	14.8	48

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19	Control of Spike Transfer at Hippocampal Mossy Fiber Synapses<i>In Vivo</i>by GABA_Aand GABA_BReceptor-Mediated Inhibition. Journal of Neuroscience, 2017, 37, 587-598.	3.6	38
20	Identification and Structure-Function Study of Positive Allosteric Modulators of Kainate Receptors. Molecular Pharmacology, 2017, 91, 576-585.	2.3	21
21	Altered surface mGluR5 dynamics provoke synaptic NMDAR dysfunction and cognitive defects in Fmr1 knockout mice. Nature Communications, 2017, 8, 1103.	12.8	71
22	Formin 2 links neuropsychiatric phenotypes at young age to an increased risk for dementia. EMBO Journal, 2017, 36, 2815-2828.	7.8	45
23	PGE 2 -EP3 signaling pathway impairs hippocampal presynaptic long-term plasticity in a mouse model of Alzheimer's disease. Neurobiology of Aging, 2017, 50, 13-24.	3.1	23
24	Control of Spike Transfer at Hippocampal Mossy Fiber Synapses In Vivo by GABA A and GABA B Receptor-Mediated Inhibition. Journal of Neuroscience, 2017, 37, 587-598.	3.6	17
25	Microgliaâ€derived purines modulate mossy fibre synaptic transmission and plasticity through P2X₄ and A₁ receptors. European Journal of Neuroscience, 2016, 43, 1366-1378.	2.6	27
26	Early synaptic deficits in the APP/PS1 mouse model of Alzheimerâ€™s disease involve neuronal adenosine A2A receptors. Nature Communications, 2016, 7, 11915.	12.8	184
27	Molecular determinants for the strictly compartmentalized expression of kainate receptors in CA3 pyramidal cells. Nature Communications, 2016, 7, 12738.	12.8	19
28	Synaptic plasticity and spatial working memory are impaired in the CD mouse model of Williams-Beuren syndrome. Molecular Brain, 2016, 9, 76.	2.6	17
29	Exclusive photorelease of signalling lipids at the plasma membrane. Nature Communications, 2015, 6, 10056.	12.8	67
30	Rabphilin 3A retains NMDA receptors at synaptic sites through interaction with GluN2A/PSD-95 complex. Nature Communications, 2015, 6, 10181.	12.8	59
31	Physiopathology of kainate receptors in epilepsy. Current Opinion in Pharmacology, 2015, 20, 83-88.	3.5	69
32	An anterograde rabies virus vector for high-resolution large-scale reconstruction of 3D neuron morphology. Brain Structure and Function, 2015, 220, 1369-1379.	2.3	30
33	Parkin regulates kainate receptors by interacting with the GluK2 subunit. Nature Communications, 2014, 5, 5182.	12.8	42
34	Scribble1/AP2 Complex Coordinates NMDA Receptor Endocytic Recycling. Cell Reports, 2014, 9, 712-727.	6.4	40
35	Insulinâ€like growth factor 2 reverses memory and synaptic deficits in <scp>APP</scp> transgenic mice. EMBO Molecular Medicine, 2014, 6, 1246-1262.	6.9	114
36	Kainate receptors in the hippocampus. European Journal of Neuroscience, 2014, 39, 1835-1844.	2.6	69

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37	Impaired hippocampusâ€dependent spatial flexibility and sociability represent autismâ€like phenotypes in GluK2 mice. Hippocampus, 2014, 24, 1059-1069.	1.9	28
38	Membrane Lipids Tune Synaptic Transmission by Direct Modulation of Presynaptic Potassium Channels. Neuron, 2014, 81, 957.	8.1	1
39	Membrane Lipids Tune Synaptic Transmission by Direct Modulation of Presynaptic Potassium Channels. Neuron, 2014, 81, 787-799.	8.1	88
40	Contribution of Aberrant GluK2-Containing Kainate Receptors to Chronic Seizures in Temporal Lobe Epilepsy. Cell Reports, 2014, 8, 347-354.	6.4	58
41	Zinc Dynamics and Action at Excitatory Synapses. Neuron, 2014, 82, 1101-1114.	8.1	184
42	Kainate Induces Mobilization of Synaptic Vesicles at the Growth Cone through the Activation of Protein Kinase A. Cerebral Cortex, 2013, 23, 531-541.	2.9	17
43	CaMKII-dependent phosphorylation of GluK5 mediates plasticity of kainate receptors. EMBO Journal, 2013, 32, 496-510.	7.8	47
44	Selective Block of Postsynaptic Kainate Receptors Reveals Their Function at Hippocampal Mossy Fiber Synapses. Cerebral Cortex, 2013, 23, 323-331.	2.9	73
45	Developmental regulation of CB1-mediated spike-time dependent depression at immature mossy fiber-CA3 synapses. Scientific Reports, 2012, 2, 285.	3.3	19
46	Contactin-associated Protein 1 (Caspr1) Regulates the Traffic and Synaptic Content of Î±-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA)-type Glutamate Receptors. Journal of Biological Chemistry, 2012, 287, 6868-6877.	3.4	28
47	Zinc Potentiates GluK3 Glutamate Receptor Function by Stabilizing the Ligand Binding Domain Dimer Interface. Neuron, 2012, 76, 565-578.	8.1	59
48	Deficits in Morphofunctional Maturation of Hippocampal Mossy Fiber Synapses in a Mouse Model of Intellectual Disability. Journal of Neuroscience, 2012, 32, 17882-17893.	3.6	57
49	Mitochondrial CB1 receptors regulate neuronal energy metabolism. Nature Neuroscience, 2012, 15, 558-564.	14.8	450
50	Kainate receptors coming of age: milestones of two decades of research. Trends in Neurosciences, 2011, 34, 154-163.	8.6	241
51	NMDA receptorâ€"dependent metaplasticity at hippocampal mossy fiber synapses. Nature Neuroscience, 2011, 14, 691-693.	14.8	53
52	Endocytosis of the Glutamate Receptor Subunit GluK3 Controls Polarized Trafficking. Journal of Neuroscience, 2011, 31, 11645-11654.	3.6	8
53	Pharmacological Activation of Kainate Receptors Drives Endocannabinoid Mobilization. Journal of Neuroscience, 2011, 31, 3243-3248.	3.6	44
54	Activityâ€dependent synaptic plasticity of NMDA receptors. Journal of Physiology, 2010, 588, 93-99.	2.9	141

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55	Impaired development of hippocampal mossy fibre synapses in mouse mutants for the presynaptic scaffold protein Bassoon. Journal of Physiology, 2010, 588, 2133-2145.	2.9	18
56	Synaptic activation of kainate receptors gates presynaptic CB1 signaling at GABAergic synapses. Nature Neuroscience, 2010, 13, 197-204.	14.8	62
57	High Firing Rate of Neonatal Hippocampal Interneurons Is Caused by Attenuation of Afterhyperpolarizing Potassium Currents by Tonically Active Kainate Receptors. Journal of Neuroscience, 2010, 30, 6507-6514.	3.6	41
58	Identification of a small-molecule inhibitor of the PICK1 PDZ domain that inhibits hippocampal LTP and LTD. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 413-418.	7.1	100
59	Synaptic Localization and Activity of ADAM10 Regulate Excitatory Synapses through N-Cadherin Cleavage. Journal of Neuroscience, 2010, 30, 16343-16355.	3.6	102
60	Profilin II Regulates the Exocytosis of Kainate Glutamate Receptors. Journal of Biological Chemistry, 2010, 285, 40060-40071.	3.4	12
61	Gating and permeation of kainate receptors: differences unveiled. Trends in Pharmacological Sciences, 2010, 31, 516-522.	8.7	60
62	Atypical Functional Properties of GluK3-Containing Kainate Receptors. Journal of Neuroscience, 2009, 29, 15499-15510.	3.6	38
63	Kainate Receptors Act as Conditional Amplifiers of Spike Transmission at Hippocampal Mossy Fiber Synapses. Journal of Neuroscience, 2009, 29, 5000-5008.	3.6	83
64	Antagonism of recombinant and native GluK3-containing kainate receptors. Neuropharmacology, 2009, 56, 131-140.	4.1	77
65	Presynaptic glutamate receptors: physiological functions and mechanisms of action. Nature Reviews Neuroscience, 2008, 9, 423-436.	10.2	296
66	Adenosine A2A Receptors Are Essential for Long-Term Potentiation of NMDA-EPSCs atÂHippocampal Mossy Fiber Synapses. Neuron, 2008, 57, 121-134.	8.1	326
67	GluR6/KA2 Kainate Receptors Mediate Slow-Deactivating Currents. Journal of Neuroscience, 2008, 28, 6402-6406.	3.6	66
68	Short-Term Plasticity of Kainate Receptor-Mediated EPSCs Induced by NMDA Receptors at Hippocampal Mossy Fiber Synapses. Journal of Neuroscience, 2007, 27, 3987-3993.	3.6	22
69	Fast Regulation of Axonal Growth Cone Motility by Electrical Activity. Journal of Neuroscience, 2007, 27, 7684-7695.	3.6	41
70	GluR7 is an essential subunit of presynaptic kainate autoreceptors at hippocampal mossy fiber synapses. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12181-12186.	7.1	127
71	Kainate Receptors. , 2007, , 53-62.		0
72	KRIP6: A novel BTB/kelch protein regulating function of kainate receptors. Molecular and Cellular Neurosciences, 2007, 34, 539-550.	2.2	43

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73	Profilin2 contributes to synaptic vesicle exocytosis, neuronal excitability, and novelty-seeking behavior. EMBO Journal, 2007, 26, 2991-3002.	7.8	122
74	Kainate receptors. Cell and Tissue Research, 2006, 326, 457-482.	2.9	230
75	An automated method to quantify and visualize colocalized fluorescent signals. Journal of Neuroscience Methods, 2005, 146, 42-49.	2.5	138
76	Short-Term Regulation of Information Processing at the Corticoaccumbens Synapse. Journal of Neuroscience, 2005, 25, 11504-11512.	3.6	10
77	Distinct Subunits in Heteromeric Kainate Receptors Mediate Ionotropic and Metabotropic Function at Hippocampal Mossy Fiber Synapses. Journal of Neuroscience, 2005, 25, 11710-11718.	3.6	135
78	Endogenous Activation of Kainate Receptors Regulates Glutamate Release and Network Activity in the Developing Hippocampus. Journal of Neuroscience, 2005, 25, 4473-4484.	3.6	105
79	Differential Trafficking of GluR7 Kainate Receptor Subunit Splice Variants. Journal of Biological Chemistry, 2005, 280, 22968-22976.	3.4	34
80	Subcellular localization and trafficking of kainate receptors. Trends in Pharmacological Sciences, 2005, 26, 20-26.	8.7	100
81	Coassembly of Two GluR6 Kainate Receptor Splice Variants within a Functional Protein Complex. Neuron, 2005, 47, 555-566.	8.1	78
82	Subunit Composition and Alternative Splicing Regulate Membrane Delivery of Kainate Receptors. Journal of Neuroscience, 2004, 24, 2506-2515.	3.6	87
83	Postnatal maturation of mossy fibre excitatory transmission in mouse CA3 pyramidal cells: a potential role for kainate receptors. Journal of Physiology, 2004, 561, 27-37.	2.9	91
84	Experimental basis for the putative role of GluR6/kainate glutamate receptor subunit in Huntington's disease natural history. Neurobiology of Disease, 2004, 15, 667-675.	4.4	18
85	Spikeâ€Dependent Intrinsic Plasticity Increases Firing Probability in Rat Striatal Neurons In Vivo. Journal of Physiology, 2003, 550, 947-959.	2.9	48
86	Rapid and Differential Regulation of AMPA and Kainate Receptors at Hippocampal Mossy Fibre Synapses by PICK1 and GRIP. Neuron, 2003, 37, 625-638.	8.1	196
87	Functional characterization of kainate receptors in the mouse nucleus accumbens. Neuropharmacology, 2002, 42, 603-611.	4.1	23
88	Recruitment of the Kainate Receptor Subunit Glutamate Receptor 6 by Cadherin/Catenin Complexes. Journal of Neuroscience, 2002, 22, 6426-6436.	3.6	94
89	Functional GluR6 Kainate Receptors in the Striatum: Indirect Downregulation of Synaptic Transmission. Journal of Neuroscience, 2000, 20, 2175-2182.	3.6	88
90	Subunit Composition of Kainate Receptors in Hippocampal Interneurons. Neuron, 2000, 28, 475-484.	8.1	194

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91	Kainate Receptor-Mediated Responses in the CA1 Field of Wild-Type and GluR6-Deficient Mice. Journal of Neuroscience, 1999, 19, 653-663.	3.6	203
92	Altered synaptic physiology and reduced susceptibility to kainate-induced seizures in GluR6-deficient mice. Nature, 1998, 392, 601-605.	27.8	450
93	Potentiation of GABAergic synaptic transmission by AMPA receptors in mouse cerebellar stellate cells: changes during development. Journal of Physiology, 1998, 509, 817-831.	2.9	51
94	Spatial distribution of kainate receptor subunit mRNA in the mouse basal ganglia and ventral mesencephalon. , 1997, 379, 541-562.		93
95	Electrophysiology of Neuronal Nicotinic Receptors in the CNS. , 1995, , 127-135.		2
96	Calcium influx through nicotinic receptor in rat central neurons: Its relevance to cellular regulation. Neuron, 1992, 8, 135-143.	8.1	370
97	Potentiation of nicotinic receptor response by external calcium in rat central neurons. Neuron, 1992, 8, 937-945.	8.1	180
98	Photoaffinity labeling of the acetylcholine binding sites on the nicotinic receptor by an aryldiazonium derivative. Biochemistry, 1988, 27, 2337-2345.	2.5	77
99	Peripheral maps and synapse elimination in the cerebellum of the rat.I. Representation of peripheral inputs through the climbing fiber pathway in the posterior vermis of the normal adult rat. Brain Research, 1987, 421, 194-210.	2.2	14
100	Peripheral maps and synapse elimination in the cerebellum of the rat. II. Representation of peripheral inputs through the climbing fiber pathway in the posterior vermis of X-irradiated adult rats. Brain Research, 1987, 421, 211-225.	2.2	15
101	Absence of spindle oscillations in the cat anterior thalamic nuclei. Brain Research, 1985, 334, 169-171.	2.2	55
102	The effects of QX314 on thalamic neurons. Brain Research, 1985, 333, 350-354.	2.2	17