Jochen C Meier

List of Publications by Year
in descending order

68 papers	2,891 citations	126858 33 h-index	175177 52 g-index
73 all docs	73 docs citations	73 times ranked	3918 citing authors

#	Article	IF	Citations
1	Fast and reversible trapping of surface glycine receptors by gephyrin. Nature Neuroscience, 2001, 4, 253-260.	7.1	237
2	E-I balance and human diseases â€“ from molecules to networking. Frontiers in Molecular Neuroscience, 2008, 1, 2.	1.4	151
3	Human iPSC-Derived Neural Progenitors Are an Effective Drug Discovery Model for Neurological mtDNA Disorders. Cell Stem Cell, 2017, 20, 659-674.e9.	5.2	126
4	RNA editing produces glycine receptor Î±3P185L, resulting in high agonist potency. Nature Neuroscience, 2005, 8, 736-744.	7.1	114
5	Glycinergic tonic inhibition of hippocampal neurons with depolarizing GABAergic transmission elicits histopathological signs of temporal lobe epilepsy. Journal of Cellular and Molecular Medicine, 2008, 12, 2848-2866.	1.6	105
6	Genetic and functional analyses demonstrate a role for abnormal glycinergic signaling in autism. Molecular Psychiatry, 2016, 21, 936-945.	4.1	85
7	Phorbol-Ester Mediated Suppression of hASH1 Synthesis: Multiple Ways to Keep the Level Down. Frontiers in Molecular Neuroscience, 2011, 4, 1.	1.4	81
8	Changes in neural network homeostasis trigger neuropsychiatric symptoms. Journal of Clinical Investigation, 2014, 124, 696-711.	3.9	81
9	Palmitoylation of Gephyrin Controls Receptor Clustering and Plasticity of GABAergic Synapses. PLoS Biology, 2014, 12, e1001908.	2.6	79
10	Identification of Parvalbumin Interneurons as Cellular Substrate of Fear Memory Persistence. Cerebral Cortex, 2016, 26, 2325-2340.	1.6	79
11	A Gephyrin-Related Mechanism Restraining Glycine Receptor Anchoring at GABAergic Synapses. Journal of Neuroscience, 2004, 24, 1398-1405.	1.7	73
12	Direct binding of <scp>GABA_A</scp> receptor Î²2 and Î²3 subunits to gephyrin. European Journal of Neuroscience, 2013, 37, 544-554.	1.2	69
13	Dynamics of Glycine Receptor Insertion in the Neuronal Plasma Membrane. Journal of Neuroscience, 2001, 21, 5036-5044.	1.7	68
14	NGF Controls Dendrite Development in Hippocampal Neurons by Binding to p75NTR and Modulating the Cellular Targets of Notch. Molecular Biology of the Cell, 2005, 16, 339-347.	0.9	68
15	Functional Heterogeneity of Gephyrins. Molecular and Cellular Neurosciences, 2000, 16, 566-577.	1.0	67
16	Spliceâ€specific roles of glycine receptor Î±3 in the hippocampus. European Journal of Neuroscience, 2009, 30, 1077-1091.	1.2	64
17	S-sulfocysteine/NMDA receptorâ€“dependent signaling underlies neurodegeneration in molybdenum cofactor deficiency. Journal of Clinical Investigation, 2017, 127, 4365-4378.	3.9	62
18	Vertebrate-specific sequences in the gephyrin E-domain regulate cytosolic aggregation and postsynaptic clustering. Journal of Cell Science, 2007, 120, 1371-1382.	1.2	61

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19	Altered Balance of Glutamatergic/GABAergic Synaptic Input and Associated Changes in Dendrite Morphology after BDNF Expression in BDNF-Deficient Hippocampal Neurons. Journal of Neuroscience, 2006, 26, 7189-7200.	1.7	59
20	Reduced SNAP-25 increases PSD-95 mobility and impairs spine morphogenesis. Cell Death and Differentiation, 2015, 22, 1425-1436.	5.0	59
21	Glycine receptors caught between genome and proteome â€“ Functional implications of RNA editing and splicing. Frontiers in Molecular Neuroscience, 2009, 2, 23.	1.4	53
22	GABAA receptor activity and PKC control inhibitory synaptogenesis in CNS tissue slices. Molecular and Cellular Neurosciences, 2003, 23, 600-613.	1.0	51
23	Translational Regulation of the Human Achaete-scute Homologue-1 by Fragile X Mental Retardation Protein. Journal of Biological Chemistry, 2009, 284, 4255-4266.	1.6	51
24	Rare variants in Î³â€aminobutyric acid type <scp>A</scp> receptor genes in rolandic epilepsy and related syndromes. Annals of Neurology, 2015, 77, 972-986.	2.8	51
25	Desensitization of Homomeric Î±1 Glycine Receptor Increases with Receptor Density. Molecular Pharmacology, 2002, 62, 817-827.	1.0	48
26	Splice-specific Functions of Gephyrin in Molybdenum Cofactor Biosynthesis. Journal of Biological Chemistry, 2008, 283, 17370-17379.	1.6	47
27	Irregular RNA splicing curtails postsynaptic gephyrin in the cornu ammonis of patients with epilepsy. Brain, 2010, 133, 3778-3794.	3.7	46
28	GABA _B autoreceptor-mediated cell type-specific reduction of inhibition in epileptic mice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15073-15078.	3.3	44
29	Slow IPSC kinetics, low levels of Î±1 subunit expression and paired-pulse depression are distinct properties of neonatal inhibitory GABAergic synaptic connections in the mouse superior colliculus. European Journal of Neuroscience, 2001, 13, 2088-2098.	1.2	43
30	Transferrin-receptor-mediated iron accumulation controls proliferation and glutamate release in glioma cells. Journal of Molecular Medicine, 2009, 87, 153-167.	1.7	40
31	Simultaneous impairment of neuronal and metabolic function of mutated gephyrin in a patient with epileptic encephalopathy. EMBO Molecular Medicine, 2015, 7, 1580-1594.	3.3	39
32	Hypoxia-induced gene expression results from selective mRNA partitioning to the endoplasmic reticulum. Nucleic Acids Research, 2015, 43, 3219-3236.	6.5	38
33	Preferential accumulation of GABAAreceptor Î³2L, not Î³2S, cytoplasmic loops at rat spinal cord inhibitory synapses. Journal of Physiology, 2004, 559, 355-365.	1.3	37
34	Imaging pathological activities of human brain tissue in organotypic culture. Journal of Neuroscience Methods, 2018, 298, 33-44.	1.3	36
35	Impaired Synapse Function during Postnatal Development in the Absence of CALEB, an EGF-like Protein Processed by Neuronal Activity. Neuron, 2005, 46, 233-245.	3.8	34
36	Step-by-step guide to building an inexpensive 3D printed motorized positioning stage for automated high-content screening microscopy. Biosensors and Bioelectronics, 2017, 92, 472-481.	5.3	34

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37	RNA Editingâ€"Systemic Relevance and Clue to Disease Mechanisms?. Frontiers in Molecular Neuroscience, 2016, 9, 124.	1.4	33
38	GluR- and TrkB-mediated maturation of GABAAreceptor function during the period of eye opening. European Journal of Neuroscience, 2005, 21, 431-440.	1.2	29
39	Ensemble and single particle fluorimetric techniques in concerted action to study the diffusion and aggregation of the glycine receptor Î±3 isoforms in the cell plasma membrane. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 3131-3140.	1.4	29
40	A bright FIT-PNA hybridization probe for the hybridization state specific analysis of a C â†' U RNA edit via FRET in a binary system. Chemical Science, 2018, 9, 4794-4800.	3.7	28
41	Analysis of Î±3 GlyR single particle tracking in the cell membrane. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 544-553.	1.9	27
42	Synaptic Anchoring of Glycine Receptors in Developing Collicular Neurons under Control of Metabotropic Glutamate Receptor Activity. Molecular and Cellular Neurosciences, 2002, 21, 324-340.	1.0	25
43	Presynaptic mechanisms of neuronal plasticity and their role in epilepsy. Frontiers in Cellular Neuroscience, 2014, 8, 164.	1.8	25
44	RNA Editing and Retrotransposons in Neurology. Frontiers in Molecular Neuroscience, 2018, 11, 163.	1.4	22
45	Membrane distribution of the glycine receptor Î±3 studied by optical super-resolution microscopy. Histochemistry and Cell Biology, 2014, 142, 79-90.	0.8	21
46	Functional Hallmarks of GABAergic Synapse Maturation and the Diverse Roles of Neurotrophins. Frontiers in Cellular Neuroscience, 2011, 5, 13.	1.8	20
47	Chloride transporter KCC2-dependent neuroprotection depends on the N-terminal protein domain. Cell Death and Disease, 2015, 6, e1776-e1776.	2.7	20
48	Intracellular glycine receptor function facilitates glioma formation in vivo. Journal of Cell Science, 2014, 127, 3687-98.	1.2	17
49	A Novel RNA Editing Sensor Tool and a Specific Agonist Determine Neuronal Protein Expression of RNA-Edited Glycine Receptors and Identify a Genomic APOBEC1 Dimorphism as a New Genetic Risk Factor of Epilepsy. Frontiers in Molecular Neuroscience, 2017, 10, 439.	1.4	17
50	Electrophysiological Signature of Homomeric and Heteromeric Glycine Receptor Channels. Journal of Biological Chemistry, 2016, 291, 18030-18040.	1.6	13
51	The enigma of transmitter-selective receptor accumulation at developing inhibitory synapses. Cell and Tissue Research, 2003, 311, 271-276.	1.5	11
52	Inhibition of Î±-subunit glycine receptors by quinoxalines. NeuroReport, 2003, 14, 1507-1510.	0.6	11
53	New insights in endogenous modulation of ligand-gated ion channels: Histamine is an inverse agonist at strychnine sensitive glycine receptors. European Journal of Pharmacology, 2013, 710, 59-66.	1.7	11
54	Shutdown of Achaete-scute Homolog-1 Expression by Heterogeneous Nuclear Ribonucleoprotein (hnRNP)-A2/B1 in Hypoxia. Journal of Biological Chemistry, 2014, 289, 26973-26988.	1.6	10

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55	Chemo-biological mRNA imaging with single nucleotide specificity. Chemical Communications, 2019, 55, 14817-14820.	2.2	10
56	The Anti-amyloid Compound DO1 Decreases Plaque Pathology and Neuroinflammation-Related Expression Changes in 5xFAD Transgenic Mice. Cell Chemical Biology, 2019, 26, 109-120.e7.	2.5	8
57	Identification of a New Genomic Hot Spot of Evolutionary Diversification of Protein Function. PLoS ONE, 2015, 10, e0125413.	1.1	6
58	Editorial: Metabolic Control of Brain Homeostasis. Frontiers in Molecular Neuroscience, 2017, 10, 184.	1.4	4
59	In vivo Imaging of Fully Active Brain Tissue in Awake Zebrafish Larvae and Juveniles by Skull and Skin Removal. Journal of Visualized Experiments, 2021, , .	0.2	4
60	Dimethylethanolamine Decreases Epileptiform Activity in Acute Human Hippocampal Slices in vitro. Frontiers in Molecular Neuroscience, 2019, 12, 209.	1.4	3
61	Biallelic gephyrin variants lead to impaired GABAergic inhibition in a patient with developmental and epileptic encephalopathy. Human Molecular Genetics, 2022, 31, 901-913.	1.4	3
62	Development and Use- Dependent Modification of Synaptic Connections in the Visual Layers of the Rodent Superior Colliculus. , 2003, , .		2
63	Genetic techniques and circuit analysis. Frontiers in Molecular Neuroscience, 2010, 3, 4.	1.4	1
64	Homeostasis of Neuronal Excitability Via Synaptic and Intrinsic Inhibitory Mechanisms. , 2015, , 51-72.		1
65	Frontiers in Molecular Neuroscience â€“ RÃ©sumÃ© and Perspective. Frontiers in Molecular Neuroscience, 2011, 4, 58.	1.4	0
66	iPSC-derived neural progenitors carrying a MT-ATP6 mutation exhibit mitochondrial hyperpolarization and calcium-related defects. Mitochondrion, 2015, 24, S28-S29.	1.6	0
67	Editorial: Spring Hippocampal Research Conference and Beyond. Frontiers in Molecular Neuroscience, 2021, 14, 773308.	1.4	0
68	Protein Kinases and Synaptogenesis. , 2006, , 311-332.		0