Lonnie P Wollmuth

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6309532/publications.pdf

Version: 2024-02-01

61 papers	6,333 citations	136950 32 h-index	133252 59 g-index
67 all docs	67 docs citations	67 times ranked	6229 citing authors

#	Article	IF	Citations
1	Expression and distribution of synaptotagmin family members in the zebrafish retina. Journal of Comparative Neurology, 2022, 530, 705-728.	1.6	4
2	From bedsideâ€toâ€bench: What diseaseâ€associated variants are teaching us about the NMDA receptor. Journal of Physiology, 2021, 599, 397-416.	2.9	34
3	NMDA Receptors Require Multiple Pre-opening Gating Steps for Efficient Synaptic Activity. Neuron, 2021, 109, 488-501.e4.	8.1	18
4	The diverse and complex modes of action of anti-NMDA receptor autoantibodies. Neuropharmacology, 2021, 194, 108624.	4.1	15
5	Structure, Function, and Pharmacology of Glutamate Receptor Ion Channels. Pharmacological Reviews, 2021, 73, 1469-1658.	16.0	237
6	Lupus autoantibodies act as positive allosteric modulators at GluN2A-containing NMDA receptors and impair spatial memory. Nature Communications, 2020, 11, 1403.	12.8	36
7	Voltage dependent allosteric modulation of IPSCs by benzodiazepines. Brain Research, 2020, 1736, 146699.	2.2	3
8	A Model to Study NMDA Receptors in Early Nervous System Development. Journal of Neuroscience, 2020, 40, 3631-3645.	3.6	17
9	De novo<i>GRIN</i>variants in NMDA receptor M2 channel poreâ€forming loop are associated with neurological diseases. Human Mutation, 2019, 40, 2393-2413.	2.5	48
10	Tracking Newly Released Synaptic Vesicle Proteins at Ribbon Active Zones. IScience, 2019, 17, 10-23.	4.1	13
11	Prying open a glutamate receptor gate. Journal of General Physiology, 2019, 151, 396-399.	1.9	1
12	An interâ€dimer allosteric switch controls NMDA receptor activity. EMBO Journal, 2019, 38, .	7.8	111
13	Ion permeation in ionotropic glutamate receptors: still dynamic after all these years. Current Opinion in Physiology, 2018, 2, 36-41.	1.8	31
14	Structure, function, and allosteric modulation of NMDA receptors. Journal of General Physiology, 2018, 150, 1081-1105.	1.9	363
15	Input-specific maturation of NMDAR-mediated transmission onto parvalbumin-expressing interneurons in layers 2/3 of the visual cortex. Journal of Neurophysiology, 2018, 120, 3063-3076.	1.8	11
16	A conserved glycine harboring disease-associated mutations permits NMDA receptor slow deactivation and high Ca2+ permeability. Nature Communications, 2018, 9, 3748.	12.8	43
17	A Swiss army knife for targeting receptors. ELife, 2018, 7, .	6.0	0
18	Advancing NMDA Receptor Physiology by Integrating Multiple Approaches. Trends in Neurosciences, 2017, 40, 129-137.	8.6	20

#	ARTICLE	IF	CITATIONS
19	Divergent roles of a peripheral transmembrane segment in AMPA and NMDA receptors. Journal of General Physiology, 2017, 149, 661-680.	1.9	41
20	The Transmembrane Domain Mediates Tetramerization of Î±-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA) Receptors. Journal of Biological Chemistry, 2016, 291, 6595-6606.	3.4	23
21	A Molecular Determinant of Subtype-Specific Desensitization in Ionotropic Glutamate Receptors. Journal of Neuroscience, 2016, 36, 2617-2622.	3.6	42
22	Assaying the Energetics of NMDA Receptor Pore Opening. Neuromethods, 2016, , 145-162.	0.3	1
23	Assaying AMPA Receptor Oligomerization. Neuromethods, 2016, , 3-14.	0.3	3
24	Mechanism-Based Mathematical Model for Gating of Ionotropic Glutamate Receptors. Journal of Physical Chemistry B, 2015, 119, 10934-10940.	2.6	12
25	Assembly of AMPA receptors: mechanisms and regulation. Journal of Physiology, 2015, 593, 39-48.	2.9	71
26	Mechanical coupling maintains the fidelity of NMDA receptorâ€“mediated currents. Nature Neuroscience, 2014, 17, 914-922.	14.8	96
27	Asynchronous Movements Prior to Pore Opening in NMDA Receptors. Journal of Neuroscience, 2013, 33, 12052-12066.	3.6	48
28	Modulating the Intrinsic Disorder in the Cytoplasmic Domain Alters the Biological Activity of the N-Methyl-d-aspartate-sensitive Glutamate Receptor. Journal of Biological Chemistry, 2013, 288, 22506-22515.	3.4	33
29	Subgroups of parvalbumin-expressing interneurons in layers 2/3 of the visual cortex. Journal of Neurophysiology, 2013, 109, 1600-1613.	1.8	33
30	Synapse-Associated Protein 97 Regulates the Membrane Properties of Fast-Spiking Parvalbumin Interneurons in the Visual Cortex. Journal of Neuroscience, 2013, 33, 12739-12750.	3.6	15
31	A Eukaryotic Specific Transmembrane Segment is Required for Tetramerization in AMPA Receptors. Journal of Neuroscience, 2013, 33, 9840-9845.	3.6	31
32	Flip-Flopping to the Membrane. Neuron, 2012, 76, 463-465.	8.1	3
33	Interaction of the M4 Segment with Other Transmembrane Segments Is Required for Surface Expression of Mammalian Î±-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA) Receptors. Journal of Biological Chemistry, 2011, 286, 40205-40218.	3.4	31
34	GluN1-Specific Redox Effects on the Kinetic Mechanism of NMDA Receptor Activation. Biophysical Journal, 2011, 101, 2389-2398.	0.5	21
35	Arrangement of Subunits in Functional NMDA Receptors. Journal of Neuroscience, 2011, 31, 11295-11304.	3.6	92
36	Local constraints in either the GluN1 or GluN2 subunit equally impair NMDA receptor pore opening. Journal of General Physiology, 2011, 138, 179-194.	1.9	45

#	Article	IF	Citations
37	Effect of Src Kinase Phosphorylation on Disordered C-terminal Domain of N-Methyl-d-aspartic Acid (NMDA) Receptor Subunit GluN2B Protein. Journal of Biological Chemistry, 2011, 286, 29904-29912.	3.4	44
38	Expression pattern of membraneâ€associated guanylate kinases in interneurons of the visual cortex. Journal of Comparative Neurology, 2010, 518, 4842-4854.	1.6	11
39	Gating Modes in AMPA Receptors. Journal of Neuroscience, 2010, 30, 4449-4459.	3.6	58
40	Specific Sites within the Ligand-Binding Domain and Ion Channel Linkers Modulate NMDA Receptor Gating. Journal of Neuroscience, 2010, 30, 11792-11804.	3.6	61
41	Glutamate Receptor Ion Channels: Structure, Regulation, and Function. Pharmacological Reviews, 2010, 62, 405-496.	16.0	2,973
42	Excitatory view of a receptor. Nature, 2009, 462, 729-731.	27.8	1
43	Structural Correlates of Ionotropic Glutamate Receptor Function. , 2008, , 247-297.		0
44	Subunit-specific Contribution of Pore-forming Domains to NMDA Receptor Channel Structure and Gating. Journal of General Physiology, 2007, 129, 509-525.	1.9	82
45	Target-Specific Regulation of Synaptic Amplitudes in the Neocortex. Journal of Neuroscience, 2005, 25, 1024-1033.	3.6	32
46	State-Dependent Changes in the Electrostatic Potential in the Pore of a GluR Channel. Biophysical Journal, 2005, 88, 235-242.	0.5	34
47	Block of AMPA Receptor Desensitization by a Point Mutation outside the Ligand-Binding Domain. Journal of Neuroscience, 2004, 24, 4728-4736.	3.6	86
48	Structure and gating of the glutamate receptor ion channel. Trends in Neurosciences, 2004, 27, 321-328.	8.6	193
49	The Outer Pore of the Glutamate Receptor Channel Has 2-Fold Rotational Symmetry. Neuron, 2004, 41, 367-378.	8.1	88
50	Extracellular Vestibule Determinants of Ca 2+ Influx in Ca 2+ â€Permeable AMPA Receptor Channels. Journal of Physiology, 2003, 549, 439-452.	2.9	19
51	Different Gating Mechanisms in Glutamate Receptor and K⁺Channels. Journal of Neuroscience, 2003, 23, 7559-7568.	3.6	58
52	Staggering of Subunits in NMDAR Channels. Biophysical Journal, 2002, 83, 3304-3314.	0.5	56
53	Molecular Rearrangements of the Extracellular Vestibule in NMDAR Channels during Gating. Neuron, 2002, 33, 75-85.	8.1	103
54	DRPEER: A Motif in the Extracellular Vestibule Conferring High Ca²⁺Flux Rates in NMDA Receptor Channels. Journal of Neuroscience, 2002, 22, 10209-10216.	3.6	77

#	ARTICLE	IF	CITATIONS
55	Voltage and concentration dependence of Ca 2+ permeability in recombinant glutamate receptor subtypes. Journal of Physiology, 2002, 538, 25-39.	2.9	66
56	The Lurcher Mutation Identifies Î´2 as an AMPA/Kainate Receptor-Like Channel That Is Potentiated by Ca²⁺. Journal of Neuroscience, 2000, 20, 5973-5980.	3.6	79
57	Intracellular Mg2+interacts with structural determinants of the narrow constriction contributed by the NR1-subunit in the NMDA receptor channel. Journal of Physiology, 1998, 506, 33-52.	2.9	48
58	Adjacent asparagines in the NR2-subunit of the NMDA receptor channel control the voltage-dependent block by extracellular Mg2+. Journal of Physiology, 1998, 506, 13-32.	2.9	132
59	Facilitation of currents through rat Ca2+-permeable AMPA receptor channels by activity-dependent relief from polyamine block. Journal of Physiology, 1998, 511, 361-377.	2.9	101
60	Different Mechanisms of Ca2+ Transport in NMDA and Ca2+-permeable AMPA Glutamate Receptor Channels. Journal of General Physiology, 1998, 112, 623-636.	1.9	64
61	Structure of the NMDA Receptor Channel M2 Segment Inferred from the Accessibility of Substituted Cysteines. Neuron, 1996, 17, 343-352.	8.1	220