Stephen F Traynelis

List of Publications by Year
in descending order

200 papers	18,648 citations	12322 69 h-index	13758 129 g-index
227 all docs	227 docs citations	227 times ranked	14878 citing authors

#	Article	IF	Citations
1	Glutamate Receptor Ion Channels: Structure, Regulation, and Function. Pharmacological Reviews, 2010, 62, 405-496.	7.1	2,973
2	Proton inhibition of N-methyl-D-aspartate receptors in cerebellar neurons. Nature, 1990, 345, 347-350.	13.7	515
3	Potentiation of NMDA receptor currents by arachidonic acid. Nature, 1992, 355, 722-725.	13.7	435
4	Metabotropic Glutamate Receptors 1 and 5 Differentially Regulate CA1 Pyramidal Cell Function. Journal of Neuroscience, 2001, 21, 5925-5934.	1.7	401
5	Rapid-time-course miniature and evoked excitatory currents at cerebellar synapses in situ. Nature, 1992, 355, 163-166.	13.7	365
6	Structural basis for partial agonist action at ionotropic glutamate receptors. Nature Neuroscience, 2003, 6, 803-810.	7.1	364
7	Structure, function, and allosteric modulation of NMDA receptors. Journal of General Physiology, 2018, 150, 1081-1105.	0.9	363
8	Subunit-specific gating controls rat NR1/NR2A and NR1/NR2B NMDA channel kinetics and synaptic signalling profiles. Journal of Physiology, 2005, 563, 345-358.	1.3	358
9	Adenosine A2A receptor mediates microglial process retraction. Nature Neuroscience, 2009, 12, 872-878.	7.1	307
10	Serine proteases and brain damage â€“ is there a link?. Trends in Neurosciences, 2000, 23, 399-407.	4.2	255
11	<i>GRIN2A</i> mutation and earlyâ€onset epileptic encephalopathy: personalized therapy with memantine. Annals of Clinical and Translational Neurology, 2014, 1, 190-198.	1.7	248
12	Control of Voltage-Independent Zinc Inhibition of NMDA Receptors by the NR1 Subunit. Journal of Neuroscience, 1998, 18, 6163-6175.	1.7	246
13	Distinct Functional and Pharmacological Properties of Triheteromeric GluN1/GluN2A/GluN2B NMDA Receptors. Neuron, 2014, 81, 1084-1096.	3.8	246
14	Mechanism of Ca2+/calmodulin-dependent kinase II regulation of AMPA receptor gating. Nature Neuroscience, 2011, 14, 727-735.	7.1	241
15	Identification of two cysteine residues that are required for redox modulation of the NMDA subtype of glutamate receptor. Neuron, 1994, 13, 929-936.	3.8	237
16	Structure, Function, and Pharmacology of Glutamate Receptor Ion Channels. Pharmacological Reviews, 2021, 73, 1469-1658.	7.1	237
17	Estimated conductance of glutamate receptor channels activated during EPSCs at the cerebellar mossy fiber-granule cell synapse. Neuron, 1993, 11, 279-289.	3.8	235
18	Potentiation of NMDA Receptor Function by the Serine Protease Thrombin. Journal of Neuroscience, 2000, 20, 4582-4595.	1.7	217

#	ARTICLE	IF	CITATIONS
19	Activation of NR1/NR2B NMDA receptors. Nature Neuroscience, 2003, 6, 144-152.	7.1	198
20	Common Signaling Pathways Link Activation of Murine PAR-1, LPA, and S1P Receptors to Proliferation of Astrocytes. Molecular Pharmacology, 2003, 64, 1199-1209.	1.0	198
21	Phenylethanolamines inhibit NMDA receptors by enhancing proton inhibition. Nature Neuroscience, 1998, 1, 659-667.	7.1	193
22	The contribution of protease-activated receptor 1 to neuronal damage caused by transient focal cerebral ischemia. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13019-13024.	3.3	190
23	<i>GRIN2B</i>encephalopathy: novel findings on phenotype, variant clustering, functional consequences and treatment aspects. Journal of Medical Genetics, 2017, 54, 460-470.	1.5	190
24	Control of NMDA Receptor Function by the NR2 Subunit Amino-Terminal Domain. Journal of Neuroscience, 2009, 29, 12045-12058.	1.7	189
25	Astrocytic control of synaptic NMDA receptors. Journal of Physiology, 2007, 581, 1057-1081.	1.3	186
26	Human GRIN2B variants in neurodevelopmental disorders. Journal of Pharmacological Sciences, 2016, 132, 115-121.	1.1	180
27	Ionotropic GABA and Glutamate Receptor Mutations and Human Neurologic Diseases. Molecular Pharmacology, 2015, 88, 203-217.	1.0	177
28	New advances in NMDA receptor pharmacology. Trends in Pharmacological Sciences, 2011, 32, 726-733.	4.0	176
29	Glutamate Receptor Gating. Critical Reviews in Neurobiology, 2004, 16, 187-224.	3.3	168
30	Selective RNA editing and subunit assembly of native glutamate receptors. Neuron, 1994, 13, 131-147.	3.8	160
31	Mechanistic Insight into NMDA Receptor Dysregulation by Rare Variants in the GluN2A and GluN2B Agonist Binding Domains. American Journal of Human Genetics, 2016, 99, 1261-1280.	2.6	158
32	Caffeine-Mediated Inhibition of Calcium Release Channel Inositol 1,4,5-Trisphosphate Receptor Subtype 3 Blocks Glioblastoma Invasion and Extends Survival. Cancer Research, 2010, 70, 1173-1183.	0.4	157
33	Norepinephrine Modulates the Motility of Resting and Activated Microglia via Different Adrenergic Receptors. Journal of Biological Chemistry, 2013, 288, 15291-15302.	1.6	154
34	Subunit-Specific Agonist Activity at NR2A-, NR2B-, NR2C-, and NR2D-Containing<i>N</i>-Methyl-d-aspartate Glutamate Receptors. Molecular Pharmacology, 2007, 72, 907-920.	1.0	151
35	Protease-activated receptor-1 in human brain: localization and functional expression in astrocytes. Experimental Neurology, 2004, 188, 94-103.	2.0	140
36	Structural Features of the Glutamate Binding Site in Recombinant NR1/NR2A N-Methyl-d-aspartate Receptors Determined by Site-Directed Mutagenesis and Molecular Modeling. Molecular Pharmacology, 2005, 67, 1470-1484.	1.0	138

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37	Ionotropic glutamate-like receptor Î´2 binds <scp>d</scp> -serine and glycine. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14116-14121.	3.3	138
38	GRIN2D Recurrent De Novo Dominant Mutation Causes a Severe Epileptic Encephalopathy Treatable with NMDA Receptor Channel Blockers. American Journal of Human Genetics, 2016, 99, 802-816.	2.6	138
39	A subunit-selective potentiator of NR2C- and NR2D-containing NMDA receptors. Nature Communications, 2010, 1, 90.	5.8	137
40	Getting the most out of noise in the central nervous system. Trends in Neurosciences, 1998, 21, 137-145.	4.2	136
41	Subunit-specific mechanisms and proton sensitivity of NMDA receptor channel block. Journal of Physiology, 2007, 581, 107-128.	1.3	133
42	Functional analysis of a de novo GRIN2A missense mutation associated with early-onset epileptic encephalopathy. Nature Communications, 2014, 5, 3251.	5.8	128
43	Activation of Protease-Activated Receptor-1 Triggers Astrogliosis after Brain Injury. Journal of Neuroscience, 2005, 25, 4319-4329.	1.7	126
44	Pharmacology of dextromethorphan: Relevance to dextromethorphan/quinidine (NuedextaÂ®) clinical use. , 2016, 164, 170-182.		125
45	Antidepressant-relevant concentrations of the ketamine metabolite (2 <i>R</i> ,6 <i>R</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Sciences of the United States of America, 2019, 116, 5160-5169.	3.3	120
46	Molecular Mechanism of Disease-Associated Mutations in the Pre-M1 Helix of NMDA Receptors and Potential Rescue Pharmacology. PLoS Genetics, 2017, 13, e1006536.	1.5	117
47	Control of rat GluR6 glutamate receptor open probability by protein kinase A and calcineurin. Journal of Physiology, 1997, 503, 513-531.	1.3	109
48	Systemic inflammation regulates microglial responses to tissue damage<i>in vivo</i>. Glia, 2014, 62, 1345-1360.	2.5	106
49	NMDA Receptors in the Central Nervous System. Methods in Molecular Biology, 2017, 1677, 1-80.	0.4	105
50	Bestrophin-1 Encodes for the Ca²⁺-Activated Anion Channel in Hippocampal Astrocytes. Journal of Neuroscience, 2009, 29, 13063-13073.	1.7	101
51	Subunit-Selective Allosteric Inhibition of Glycine Binding to NMDA Receptors. Journal of Neuroscience, 2012, 32, 6197-6208.	1.7	99
52	Activation of recombinant NR1/NR2C NMDA receptors. Journal of Physiology, 2008, 586, 4425-4439.	1.3	95
53	Control of Assembly and Function of Glutamate Receptors by the Amino-Terminal Domain. Molecular Pharmacology, 2010, 78, 535-549.	1.0	95
54	Molecular Determinants of Proton-Sensitive N-Methyl-d-aspartate Receptor Gating. Molecular Pharmacology, 2003, 63, 1212-1222.	1.0	94

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55	Adenosine A2A receptor antagonism reverses inflammation-induced impairment of microglial process extension in a model of Parkinson's disease. Neurobiology of Disease, 2014, 67, 191-202.	2.1	94
56	Conserved Structural and Functional Control of N-Methyl-d-aspartate Receptor Gating by Transmembrane Domain M3. Journal of Biological Chemistry, 2005, 280, 29708-29716.	1.6	92
57	Structural Determinants of d-Cycloserine Efficacy at the NR1/NR2C NMDA Receptors. Journal of Neuroscience, 2010, 30, 2741-2754.	1.7	92
58	Distinct roles of GRIN2A and GRIN2B variants in neurological conditions. F1000Research, 2019, 8, 1940.	0.8	92
59	Protease-activated receptor signaling: new roles and regulatory mechanisms. Current Opinion in Hematology, 2007, 14, 230-235.	1.2	91
60	Mechanism for Noncompetitive Inhibition by Novel GluN2C/D <i>N</i>-Methyl-d-aspartate Receptor Subunit-Selective Modulators. Molecular Pharmacology, 2011, 80, 782-795.	1.0	89
61	P2Y1 receptor signaling is controlled by interaction with the PDZ scaffold NHERF-2. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8042-8047.	3.3	88
62	S-nitrosylation of AMPA receptor GluA1 regulates phosphorylation, single-channel conductance, and endocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1077-1082.	3.3	86
63	Modulation of glycine potency in rat recombinant NMDA receptors containing chimeric NR2A/2D subunits expressed in <i>Xenopus laevis</i> oocytes. Journal of Physiology, 2008, 586, 227-245.	1.3	85
64	GluN2D-Containing N-methyl-d-Aspartate Receptors Mediate Synaptic Transmission in Hippocampal Interneurons and Regulate Interneuron Activity. Molecular Pharmacology, 2016, 90, 689-702.	1.0	84
65	Quinazolin-4-one Derivatives: A Novel Class of Noncompetitive NR2C/D Subunit-Selective <i>N</i>-Methyl-<scp>d</scp>-aspartate Receptor Antagonists. Journal of Medicinal Chemistry, 2010, 53, 5476-5490.	2.9	83
66	GRIN1 mutation associated with intellectual disability alters NMDA receptor trafficking and function. Journal of Human Genetics, 2017, 62, 589-597.	1.1	81
67	Protons Trap NR1/NR2B NMDA Receptors in a Nonconducting State. Journal of Neuroscience, 2005, 25, 42-51.	1.7	78
68	Ligand-specific deactivation time course of GluN1/GluN2D NMDA receptors. Nature Communications, 2011, 2, 294.	5.8	78
69	Structural Determinants of Agonist Efficacy at the Glutamate Binding Site of<i>N</i>-Methyl-d-Aspartate Receptors. Molecular Pharmacology, 2013, 84, 114-127.	1.0	76
70	Distinct Functional Roles of the Metabotropic Glutamate Receptors 1 and 5 in the Rat Globus Pallidus. Journal of Neuroscience, 2003, 23, 122-130.	1.7	74
71	Molecular pharmacology of human NMDA receptors. Neurochemistry International, 2012, 61, 601-609.	1.9	74
72	Software-based correction of single compartment series resistance errors. Journal of Neuroscience Methods, 1998, 86, 25-34.	1.3	73

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73	De novo mutations in GRIN1 cause extensive bilateral polymicrogyria. Brain, 2018, 141, 698-712.	3.7	72
74	Novel NMDA receptor modulators: an update. Expert Opinion on Therapeutic Patents, 2012, 22, 1337-1352.	2.4	69
75	Structural Determinants and Mechanism of Action of a GluN2C-selective NMDA Receptor Positive Allosteric Modulator. Molecular Pharmacology, 2014, 86, 548-560.	1.0	69
76	Mechanism of Partial Agonism at NMDA Receptors for a Conformationally Restricted Glutamate Analog. Journal of Neuroscience, 2005, 25, 7858-7866.	1.7	68
77	Structural aspects of AMPA receptor activation, desensitization and deactivation. Current Opinion in Neurobiology, 2007, 17, 281-288.	2.0	68
78	Tonic Activation of GluN2C/GluN2D-Containing NMDA Receptors by Ambient Glutamate Facilitates Cortical Interneuron Maturation. Journal of Neuroscience, 2019, 39, 3611-3626.	1.7	68
79	Structural and Mechanistic Determinants of a Novel Site for Noncompetitive Inhibition of GluN2D-Containing NMDA Receptors. Journal of Neuroscience, 2011, 31, 3650-3661.	1.7	67
80	Functional Evaluation of a De Novo <i>GRIN2A</i> Mutation Identified in a Patient with Profound Global Developmental Delay and Refractory Epilepsy. Molecular Pharmacology, 2017, 91, 317-330.	1.0	66
81	Allosteric interaction between zinc and glutamate binding domains on NR2A causes desensitization of NMDA receptors. Journal of Physiology, 2005, 569, 381-393.	1.3	64
82	Channel-mediated astrocytic glutamate modulates hippocampal synaptic plasticity by activating postsynaptic NMDA receptors. Molecular Brain, 2015, 8, 7.	1.3	64
83	A Rare Variant Identified Within the GluN2B C-Terminus in a Patient with Autism Affects NMDA Receptor Surface Expression and Spine Density. Journal of Neuroscience, 2017, 37, 4093-4102.	1.7	64
84	PAR1 and PAR2 Couple to Overlapping and Distinct Sets of G Proteins and Linked Signaling Pathways to Differentially Regulate Cell Physiology. Molecular Pharmacology, 2010, 77, 1005-1015.	1.0	61
85	Plasmin Potentiates Synaptic N-Methyl-D-aspartate Receptor Function in Hippocampal Neurons through Activation of Protease-activated Receptor-1. Journal of Biological Chemistry, 2008, 283, 20600-20611.	1.6	60
86	Three rare diseases in one Sib pair: RAI1, PCK1, GRIN2B mutations associated with Smithâ€"Magenis Syndrome, cytosolic PEPCK deficiency and NMDA receptor glutamate insensitivity. Molecular Genetics and Metabolism, 2014, 113, 161-170.	0.5	58
87	Modulation of the Dimer Interface at Ionotropic Glutamate-Like Receptor Î´2 by d-Serine and Extracellular Calcium. Journal of Neuroscience, 2009, 29, 907-917.	1.7	57
88	Contribution of the M1 Transmembrane Helix and Pre-M1 Region to Positive Allosteric Modulation and Gating of <i>N</i>-Methyl-d-Aspartate Receptors. Molecular Pharmacology, 2013, 83, 1045-1056.	1.0	57
89	NMDA Receptors Containing the GluN2D Subunit Control Neuronal Function in the Subthalamic Nucleus. Journal of Neuroscience, 2015, 35, 15971-15983.	1.7	57
90	Context-Dependent GluN2B-Selective Inhibitors of NMDA Receptor Function Are Neuroprotective with Minimal Side Effects. Neuron, 2015, 85, 1305-1318.	3.8	57

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91	Structural Mechanism of Functional Modulation by Gene Splicing in NMDA Receptors. Neuron, 2018, 98, 521-529.e3.	3.8	57
92	Allosteric Regulation and Spatial Distribution of Kainate Receptors Bound to Ancillary Proteins. Journal of Physiology, 2003, 547, 373-385.	1.3	56
93	PAR-1 Deficiency Protects against Neuronal Damage and Neurologic Deficits after Unilateral Cerebral Hypoxia/Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 964-971.	2.4	55
94	Zinc inhibition of rat NR1/NR2A <i>N</i>â€methylâ€<scp>d</scp>â€aspartate receptors. Journal of Physiology, 2008, 586, 763-778.	1.3	55
95	GluN1 splice variant control of GluN1/GluN2D NMDA receptors. Journal of Physiology, 2012, 590, 3857-3875.	1.3	52
96	A de novo loss-of-function GRIN2A mutation associated with childhood focal epilepsy and acquired epileptic aphasia. PLoS ONE, 2017, 12, e0170818.	1.1	51
97	Modelling and treating GRIN2A developmental and epileptic encephalopathy in mice. Brain, 2020, 143, 2039-2057.	3.7	51
98	Protease activated receptor 1-induced glutamate release in cultured astrocytes is mediated by Bestrophin-1 channel but not by vesicular exocytosis. Molecular Brain, 2012, 5, 38.	1.3	50
99	Heterogeneous clinical and functional features of GRIN2D-related developmental and epileptic encephalopathy. Brain, 2019, 142, 3009-3027.	3.7	49
100	Open probability of homomeric murine 5â€HT 3A serotonin receptors depends on subunit occupancy. Journal of Physiology, 2001, 535, 427-443.	1.3	48
101	Activation of protease activated receptor 1 increases the excitability of the dentate granule neurons of hippocampus. Molecular Brain, 2011, 4, 32.	1.3	48
102	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.	1.1	48
103	Learning and memory deficits in mice lacking protease activated receptor-1. Neurobiology of Learning and Memory, 2007, 88, 295-304.	1.0	47
104	Protease-activated receptor 1-dependent neuronal damage involves NMDA receptor function. Experimental Neurology, 2009, 217, 136-146.	2.0	47
105	The PDZ Scaffold NHERF-2 Interacts with mGluR5 and Regulates Receptor Activity. Journal of Biological Chemistry, 2006, 281, 29949-29961.	1.6	46
106	Exacerbation of Dopaminergic Terminal Damage in a Mouse Model of Parkinson's Disease by the G-Protein-Coupled Receptor Protease-Activated Receptor 1. Molecular Pharmacology, 2007, 72, 653-664.	1.0	46
107	Synthesis and Structure Activity Relationship of Tetrahydroisoquinoline-Based Potentiators of GluN2C and GluN2D Containing <i>N</i>-Methyl-<scp>d</scp>-aspartate Receptors. Journal of Medicinal Chemistry, 2013, 56, 5351-5381.	2.9	46
108	Potentiation of GluN2C/D NMDA Receptor Subtypes in the Amygdala Facilitates the Retention of Fear and Extinction Learning in Mice. Neuropsychopharmacology, 2014, 39, 625-637.	2.8	46

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109	Mapping the Binding of GluN2B-Selective<i>N</i>-Methyl-d-aspartate Receptor Negative Allosteric Modulators. Molecular Pharmacology, 2012, 82, 344-359.	1.0	44
110	Structureâ€"Activity Relationships and Pharmacophore Model of a Noncompetitive Pyrazoline Containing Class of GluN2C/GluN2D Selective Antagonists. Journal of Medicinal Chemistry, 2013, 56, 6434-6456.	2.9	44
111	PKC phosphorylates GluA1-Ser831 to enhance AMPA receptor conductance. Channels, 2012, 6, 60-64.	1.5	43
112	Design, Synthesis, and Structureâ€"Activity Relationship of a Novel Series of GluN2C-Selective Potentiators. Journal of Medicinal Chemistry, 2014, 57, 2334-2356.	2.9	43
113	A Novel Negative Allosteric Modulator Selective for GluN2C/2D-Containing NMDA Receptors Inhibits Synaptic Transmission in Hippocampal Interneurons. ACS Chemical Neuroscience, 2018, 9, 306-319.	1.7	42
114	Triheteromeric GluN1/GluN2A/GluN2C NMDARs with Unique Single-Channel Properties Are the Dominant Receptor Population in Cerebellar Granule Cells. Neuron, 2018, 99, 315-328.e5.	3.8	42
115	The Serine Protease Plasmin Cleaves the Amino-terminal Domain of the NR2A Subunit to Relieve Zinc Inhibition of the N-Methyl-d-aspartate Receptors. Journal of Biological Chemistry, 2009, 284, 12862-12873.	1.6	40
116	Implementation of a Fluorescence-Based Screening Assay Identifies Histamine H3 Receptor Antagonists Clobenpropit and Iodophenpropit as Subunit-Selective <i>N</i>-Methyl-d-Aspartate Receptor Antagonists. Journal of Pharmacology and Experimental Therapeutics, 2010, 333, 650-662.	1.3	40
117	Functional and pharmacological properties of triheteromeric GluN1/2B/2D NMDA receptors. Journal of Physiology, 2019, 597, 5495-5514.	1.3	38
118	A structurally derived model of subunitâ€dependent NMDA receptor function. Journal of Physiology, 2018, 596, 4057-4089.	1.3	37
119	Structure-based discovery of antagonists for GluN3-containing N-methyl-d-aspartate receptors. Neuropharmacology, 2013, 75, 324-336.	2.0	36
120	Altered motility of plaque-associated microglia in a model of Alzheimerâ€™s disease. Neuroscience, 2016, 330, 410-420.	1.1	36
121	AMPA-Type Glutamate Receptor Conductance Changes and Plasticity: Still a Lot of Noise. Neurochemical Research, 2019, 44, 539-548.	1.6	36
122	Protease-activated receptor 1 (PAR1) coupling to Gq/11 but not to Gi/o or G12/13 is mediated by discrete amino acids within the receptor second intracellular loop. Cellular Signalling, 2012, 24, 1351-1360.	1.7	34
123	NMDA receptor modulators: an updated patent review (2013 â€" 2014). Expert Opinion on Therapeutic Patents, 2014, 24, 1349-1366.	2.4	34
124	Antagonist Properties of a Phosphono Isoxazole Amino Acid at Glutamate R1â€"4 (R,S)-2-Amino-3-(3-hydroxy-5-methyl-4-isoxazolyl)propionic Acid Receptor Subtypes. Molecular Pharmacology, 1998, 53, 590-596.	1.0	33
125	An NMDAR positive and negative allosteric modulator series share a binding site and are interconverted by methyl groups. ELife, 2018, 7, .	2.8	33
126	Is tissue plasminogen activator a threat to neurons?. Nature Medicine, 2001, 7, 17-18.	15.2	32

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127	Structural elements of a pH-sensitive inhibitor binding site in NMDA receptors. Nature Communications, 2019, 10, 321.	5.8	32
128	Structural determinants of agonist-specific kinetics at the ionotropic glutamate receptor 2. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12053-12058.	3.3	31
129	Expression and characterization of soluble amino-terminal domain of NR2B subunit of N-methyl-d-aspartate receptor. Protein Science, 2005, 14, 2275-2283.	3.1	30
130	Synthesis, structural activity-relationships, and biological evaluation of novel amide-based allosteric binding site antagonists in NR1A/NR2B N-methyl-d-aspartate receptorsâ˜†. Bioorganic and Medicinal Chemistry, 2009, 17, 6463-6480.	1.4	30
131	Pedunculopontine glutamatergic neurons control spike patterning in substantia nigra dopaminergic neurons. ELife, 2017, 6, .	2.8	30
132	NMDA receptor channel gating control by the pre-M1 helix. Journal of General Physiology, 2020, 152, .	0.9	28
133	Regulation of GluA1 <i>Î±</i>-Amino-3-Hydroxy-5-Methyl-4-Isoxazolepropionic Acid Receptor Function by Protein Kinase C at Serine-818 and Threonine-840. Molecular Pharmacology, 2014, 85, 618-629.	1.0	27
134	The Genetics of Neuropsychiatric Diseases: Looking In and Beyond the Exome. Annual Review of Neuroscience, 2015, 38, 47-68.	5.0	27
135	Pharmacology and Structural Analysis of Ligand Binding to the Orthosteric Site of Glutamate-Like GluD2 Receptors. Molecular Pharmacology, 2016, 89, 253-262.	1.0	26
136	A novel missense mutation in <i>GRIN2A</i> causes a nonepileptic neurodevelopmental disorder. Movement Disorders, 2018, 33, 992-999.	2.2	26
137	Biased modulators of NMDA receptors control channel opening and ion selectivity. Nature Chemical Biology, 2020, 16, 188-196.	3.9	26
138	Modification of potassium-induced interictal bursts and electrographic seizures by divalent cations. Neuroscience Letters, 1989, 98, 194-199.	1.0	25
139	Enantiomeric Propanolamines as selective<i>N</i>-Methyl-<scp>d</scp>-aspartate 2B Receptor Antagonists. Journal of Medicinal Chemistry, 2008, 51, 5506-5521.	2.9	25
140	Clinical and therapeutic significance of genetic variation in the GRIN gene family encoding NMDARs. Neuropharmacology, 2021, 199, 108805.	2.0	25
141	A Binding Site Tyrosine Shapes Desensitization Kinetics and Agonist Potency at GluR2. Journal of Biological Chemistry, 2005, 280, 35469-35476.	1.6	24
142	Special lecture: glial reactivity after damage: implications for scar formation and neuronal recovery. Clinical Neurosurgery, 2005, 52, 29-44.	0.2	24
143	Proton Release as a Modulator of Presynaptic Function. Neuron, 2001, 32, 960-962.	3.8	23
144	Hodgkinâ€"Huxleyâ€"Katz Prize Lecture: Genetic and pharmacological control of glutamate receptor channel through a highly conserved gating motif. Journal of Physiology, 2020, 598, 3071-3083.	1.3	23

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145	Crystal Structure and Pharmacological Characterization of a Novel N-Methyl-d-aspartate (NMDA) Receptor Antagonist at the GluN1 Glycine Binding Site. Journal of Biological Chemistry, 2013, 288, 33124-33135.	1.6	22
146	Positive allosteric modulators that target NMDA receptors rectify loss-of-function GRIN variants associated with neurological and neuropsychiatric disorders. Neuropharmacology, 2020, 177, 108247.	2.0	22
147	N-Hydroxypyrazolyl Glycine Derivatives as Selective N-Methyl-d-aspartic Acid Receptor Ligands. Journal of Medicinal Chemistry, 2008, 51, 4179-4187.	2.9	19
148	The Bioactive Protein-Ligand Conformation of GluN2C-Selective Positive Allosteric Modulators Bound to the NMDA Receptor. Molecular Pharmacology, 2018, 93, 141-156.	1.0	18
149	NMDA receptor blockade ameliorates abnormalities of spike firing of subthalamic nucleus neurons in a parkinsonian nonhuman primate. Journal of Neuroscience Research, 2018, 96, 1324-1335.	1.3	18
150	The Structureâ€"Activity Relationship of a Tetrahydroisoquinoline Class of <i>N</i>-Methyl-<scp>d</scp>-Aspartate Receptor Modulators that Potentiates GluN2B-Containing <i>N</i>-Methyl-<scp>d</scp>-Aspartate Receptors. Journal of Medicinal Chemistry, 2017, 60, 5556-5585.	2.9	17
151	Negative allosteric modulation of GluN1/GluN3 NMDA receptors. Neuropharmacology, 2020, 176, 108117.	2.0	17
152	Recurrent seizureâ€related <i>GRIN1</i> variant: Molecular mechanism and targeted therapy. Annals of Clinical and Translational Neurology, 2021, 8, 1480-1494.	1.7	17
153	Development of Radiolabeled Ligands Targeting the Glutamate Binding Site of the <i>N</i>-Methyl-<scp>d</scp>-aspartate Receptor as Potential Imaging Agents for Brain. Journal of Medicinal Chemistry, 2016, 59, 11110-11119.	2.9	16
154	Modal gating of GluN1/GluN2D NMDA receptors. Neuropharmacology, 2013, 71, 184-190.	2.0	15
155	Glutamatergic Tuning of Hyperactive Striatal Projection Neurons Controls the Motor Response to Dopamine Replacement in Parkinsonian Primates. Cell Reports, 2018, 22, 941-952.	2.9	15
156	The GluN2Bâ€Glu413Gly NMDA receptor variant arising from ade novo GRIN2Bmutation promotes ligandâ€unbinding and domain opening. Proteins: Structure, Function and Bioinformatics, 2018, 86, 1265-1276.	1.5	15
157	Effect of kindling on potassium-induced electrographic seizures in vitro. Neuroscience Letters, 1989, 105, 326-332.	1.0	14
158	L-type calcium channel activity in osteoblast cells is regulated by the actin cytoskeleton independent of protein trafficking. Journal of Bone and Mineral Metabolism, 2011, 29, 515-525.	1.3	14
159	A novel class of negative allosteric modulators of NMDA receptor function. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 5583-5588.	1.0	14
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