Mark Farrant

List of Publications by Year
in descending order

50 papers	8,701 citations	117571 34 h-index	206029 48 g-index
55 all docs	55 docs citations	55 times ranked	8219 citing authors

#	Article	IF	Citations
1	Variations on an inhibitory theme: phasic and tonic activation of GABAA receptors. Nature Reviews Neuroscience, 2005, 6, 215-229.	4.9	1,840
2	NMDA receptor subunits: diversity, development and disease. Current Opinion in Neurobiology, 2001, 11, 327-335.	2.0	1,503
3	Neuroactive steroids reduce neuronal excitability by selectively enhancing tonic inhibition mediated by Â subunit-containing GABAA receptors. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14439-14444.	3.3	714
4	Adaptive regulation of neuronal excitability by a voltage- independent potassium conductance. Nature, 2001, 409, 88-92.	13.7	530
5	Differences in Synaptic GABAA Receptor Number Underlie Variation in GABA Mini Amplitude. Neuron, 1997, 19, 697-709.	3.8	408
6	Regulation of Ca2+-permeable AMPA receptors: synaptic plasticity and beyond. Current Opinion in Neurobiology, 2006, 16, 288-297.	2.0	393
7	The cellular, molecular and ionic basis of GABAA receptor signalling. Progress in Brain Research, 2007, 160, 59-87.	0.9	318
8	NMDA-receptor channel diversity in the developing cerebellum. Nature, 1994, 368, 335-339.	13.7	310
9	Synaptic inhibition of Purkinje cells mediates consolidation of vestibulo-cerebellar motor learning. Nature Neuroscience, 2009, 12, 1042-1049.	7.1	268
10	Single-Channel Properties of Synaptic and Extrasynaptic GABA_AReceptors Suggest Differential Targeting of Receptor Subtypes. Journal of Neuroscience, 1999, 19, 2960-2973.	1.7	222
11	Stargazin attenuates intracellular polyamine block of calcium-permeable AMPA receptors. Nature Neuroscience, 2007, 10, 1260-1267.	7.1	178
12	GABAergic regulation of cerebellar NG2 cell development is altered in perinatal white matter injury. Nature Neuroscience, 2015, 18, 674-682.	7.1	167
13	Maturation of EPSCs and Intrinsic Membrane Properties Enhances Precision at a Cerebellar Synapse. Journal of Neuroscience, 2003, 23, 6074-6085.	1.7	132
14	From synapse to behavior: rapid modulation of defined neuronal types with engineered GABAA receptors. Nature Neuroscience, 2007, 10, 923-929.	7.1	108
15	Bidirectional plasticity of calcium-permeable AMPA receptors in oligodendrocyte lineage cells. Nature Neuroscience, 2011, 14, 1430-1438.	7.1	104
16	Selective regulation of long-form calcium-permeable AMPA receptors by an atypical TARP, Î³-5. Nature Neuroscience, 2009, 12, 277-285.	7.1	100
17	A Direct Comparison of the Single-Channel Properties of Synaptic and Extrasynaptic NMDA Receptors. Journal of Neuroscience, 1997, 17, 107-116.	1.7	93
18	Profound Desensitization by Ambient GABA Limits Activation of Î´-Containing GABA_AReceptors during Spillover. Journal of Neuroscience, 2011, 31, 753-763.	1.7	87

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19	Identification of subunits contributing to synaptic and extrasynaptic NMDA receptors in Golgi cells of the rat cerebellum. Journal of Physiology, 2000, 524, 147-162.	1.3	86
20	Cornichons Modify Channel Properties of Recombinant and Glial AMPA Receptors. Journal of Neuroscience, 2012, 32, 9796-9804.	1.7	86
21	An Essential Role for the Tetraspanin LHFPL4 in the Cell-Type-Specific Targeting and Clustering of Synaptic GABA A Receptors. Cell Reports, 2017, 21, 70-83.	2.9	85
22	Setting the Time Course of Inhibitory Synaptic Currents by Mixing Multiple GABAA Receptor Â Subunit Isoforms. Journal of Neuroscience, 2012, 32, 5853-5867.	1.7	83
23	NMDA receptor diversity in the cerebellum: identification of subunits contributing to functional receptors. Neuropharmacology, 1998, 37, 1369-1380.	2.0	77
24	Climbingâ€fibre activation of NMDA receptors in Purkinje cells of adult mice. Journal of Physiology, 2007, 585, 91-101.	1.3	74
25	Synaptic mGluR activation drives plasticity of calcium-permeable AMPA receptors. Nature Neuroscience, 2009, 12, 593-601.	7.1	69
26	Mapping the Interaction Sites between AMPA Receptors and TARPs Reveals a Role for the Receptor N-Terminal Domain in Channel Gating. Cell Reports, 2014, 9, 728-740.	2.9	63
27	Auxiliary Subunit GSG1L Acts to Suppress Calcium-Permeable AMPA Receptor Function. Journal of Neuroscience, 2015, 35, 16171-16179.	1.7	59
28	Probing TARP Modulation of AMPA Receptor Conductance with Polyamine Toxins. Journal of Neuroscience, 2011, 31, 7511-7520.	1.7	58
29	Channel properties reveal differential expression of TARPed and TARPless AMPARs in stargazer neurons. Nature Neuroscience, 2012, 15, 853-861.	7.1	55
30	TARP Î³-7 selectively enhances synaptic expression of calcium-permeable AMPARs. Nature Neuroscience, 2013, 16, 1266-1274.	7.1	45
31	Molecular Mechanisms Contributing to TARP Regulation of Channel Conductance and Polyamine Block of Calcium-Permeable AMPA Receptors. Journal of Neuroscience, 2014, 34, 11673-11683.	1.7	43
32	Synapseâ€specific expression of calciumâ€permeable AMPA receptors in neocortical layer 5. Journal of Physiology, 2016, 594, 837-861.	1.3	41
33	TARPâ€associated AMPA receptors display an increased maximum channel conductance and multiple kinetically distinct open states. Journal of Physiology, 2012, 590, 5723-5738.	1.3	39
34	Ca²⁺â€permeable AMPA receptors and their auxiliary subunits in synaptic plasticity and disease. Journal of Physiology, 2021, 599, 2655-2671.	1.3	38
35	A role of TARPs in the expression and plasticity of calcium-permeable AMPARs: Evidence from cerebellar neurons and glia. Neuropharmacology, 2013, 74, 76-85.	2.0	28
36	Dual Effects of TARP Î³-2 on Glutamate Efficacy Can Account for AMPA Receptor Autoinactivation. Cell Reports, 2017, 20, 1123-1135.	2.9	28

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37	Synapse Type-Dependent Expression of Calcium-Permeable AMPA Receptors. Frontiers in Synaptic Neuroscience, 2018, 10, 34.	1.3	25
38	Homomeric GluA2(R) AMPA receptors can conduct when desensitized. Nature Communications, 2019, 10, 4312.	5.8	22
39	GABA receptors, granule cells and genes. Nature, 1993, 361, 302-303.	13.7	21
40	Properties of GABAA receptor-mediated transmission at newly formed Golgi-granule cell synapses in the cerebellum. Neuropharmacology, 2003, 44, 181-189.	2.0	21
41	TARP Î³-2 Is Required for Inflammation-Associated AMPA Receptor Plasticity within Lamina II of the Spinal Cord Dorsal Horn. Journal of Neuroscience, 2017, 37, 6007-6020.	1.7	21
42	Transmembrane AMPAR Regulatory Protein Î³-2 Is Required for the Modulation of GABA Release by Presynaptic AMPARs. Journal of Neuroscience, 2015, 35, 4203-4214.	1.7	14
43	Transient developmental imbalance of cortical interneuron subtypes presages long-term changes in behavior. Cell Reports, 2021, 35, 109249.	2.9	11
44	AMPA Receptorsâ€"Another Twist?. Science, 2010, 327, 1463-1465.	6.0	10
45	Amino Acids: Inhibitory. , 0, , 225-250.		7
46	Altered Cerebellar Short-Term Plasticity but No Change in Postsynaptic AMPA-Type Glutamate Receptors in a Mouse Model of Juvenile Batten Disease. ENeuro, 2018, 5, ENEURO.0387-17.2018.	0.9	5
47	Influence of the TARP Î³8-Selective Negative Allosteric Modulator JNJ-55511118 on AMPA Receptor Gating and Channel Conductance. Molecular Pharmacology, 2022, 101, 343-356.	1.0	5
48	Insights into GABAA receptors receptor complexity from the study of cerebellar granule cells. Pharmaceutical Science Series, 2001, , 189-201.	0.0	1
49	Neurotransmitter-gated ion channels in dendrites. , 2007, , 189-224.		0
50	Differential Activation of GABAA-Receptor Subtypes. , 2007, , 87-110.		0