Stuart G Cull-Candy

List of Publications by Year
in descending order

59 papers	7,333 citations	94381 37 h-index	138417 58 g-index
66 all docs	66 docs citations	66 times ranked	5288 citing authors

#	Article	IF	Citations
1	Role of Distinct NMDA Receptor Subtypes at Central Synapses. Science Signaling, 2004, 2004, re16-re16.	1.6	579
2	Adaptive regulation of neuronal excitability by a voltage- independent potassium conductance. Nature, 2001, 409, 88-92.	13.7	530
3	Proton inhibition of N-methyl-D-aspartate receptors in cerebellar neurons. Nature, 1990, 345, 347-350.	13.7	515
4	Single-Channel Properties of Recombinant AMPA Receptors Depend on RNA Editing, Splice Variation, and Subunit Composition. Journal of Neuroscience, 1997, 17, 58-69.	1.7	429
5	Multiple-conductance channels activated by excitatory amino acids in cerebellar neurons. Nature, 1987, 325, 525-528.	13.7	422
6	Synaptic activity at calcium-permeable AMPA receptors induces a switch in receptor subtype. Nature, 2000, 405, 454-458.	13.7	417
7	Rapid-time-course miniature and evoked excitatory currents at cerebellar synapses in situ. Nature, 1992, 355, 163-166.	13.7	365
8	NMDA-receptor channel diversity in the developing cerebellum. Nature, 1994, 368, 335-339.	13.7	310
9	Structural and Functional Architecture of AMPA-Type Glutamate Receptors and Their Auxiliary Proteins. Neuron, 2017, 94, 713-730.	3.8	279
10	Multiple conductance channels in type-2 cerebellar astrocytes activated by excitatory amino acids. Nature, 1989, 339, 380-383.	13.7	278
11	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
12	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
13	Activity-Dependent Recruitment of Extrasynaptic NMDA Receptor Activation at an AMPA Receptor-Only Synapse. Journal of Neuroscience, 2002, 22, 4428-4436.	1.7	188
14	Stargazin attenuates intracellular polyamine block of calcium-permeable AMPA receptors. Nature Neuroscience, 2007, 10, 1260-1267.	7.1	178
15	Functional Correlation of NMDA Receptor ÎµÂSubunits Expression with the Properties of Single-Channel and Synaptic Currents in the Developing Cerebellum. Journal of Neuroscience, 1996, 16, 4376-4382.	1.7	167
16	GABAergic regulation of cerebellar NG2 cell development is altered in perinatal white matter injury. Nature Neuroscience, 2015, 18, 674-682.	7.1	167
17	Subunit interaction with PICK and GRIP controls Ca2+ permeability of AMPARs at cerebellar synapses. Nature Neuroscience, 2005, 8, 768-775.	7.1	152
18	NR2B and NR2D Subunits Coassemble in Cerebellar Golgi Cells to Form a Distinct NMDA Receptor Subtype Restricted to Extrasynaptic Sites. Journal of Neuroscience, 2003, 23, 4958-4966.	1.7	133

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19	Changes in synaptic structure underlie the developmental speeding of AMPA receptorâ€“mediated EPSCs. Nature Neuroscience, 2005, 8, 1310-1318.	7.1	109
20	Activity-Dependent Change in AMPA Receptor Properties in Cerebellar Stellate Cells. Journal of Neuroscience, 2002, 22, 3881-3889.	1.7	108
21	Bidirectional plasticity of calcium-permeable AMPA receptors in oligodendrocyte lineage cells. Nature Neuroscience, 2011, 14, 1430-1438.	7.1	104
22	Selective regulation of long-form calcium-permeable AMPA receptors by an atypical TARP, Î³-5. Nature Neuroscience, 2009, 12, 277-285.	7.1	100
23	A Direct Comparison of the Single-Channel Properties of Synaptic and Extrasynaptic NMDA Receptors. Journal of Neuroscience, 1997, 17, 107-116.	1.7	93
24	Slow deactivation kinetics of NMDA receptors containing NR1 and NR2D subunits in rat cerebellar Purkinje cells. Journal of Physiology, 2000, 525, 299-305.	1.3	88
25	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
26	Cornichons Modify Channel Properties of Recombinant and Glial AMPA Receptors. Journal of Neuroscience, 2012, 32, 9796-9804.	1.7	86
27	NMDA receptor diversity in the cerebellum: identification of subunits contributing to functional receptors. Neuropharmacology, 1998, 37, 1369-1380.	2.0	77
28	Climbingâ€fibre activation of NMDA receptors in Purkinje cells of adult mice. Journal of Physiology, 2007, 585, 91-101.	1.3	74
29	Synaptic mGluR activation drives plasticity of calcium-permeable AMPA receptors. Nature Neuroscience, 2009, 12, 593-601.	7.1	69
30	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
31	Auxiliary Subunit GSG1L Acts to Suppress Calcium-Permeable AMPA Receptor Function. Journal of Neuroscience, 2015, 35, 16171-16179.	1.7	59
32	The density of AMPA receptors activated by a transmitter quantum at the climbing fibreâ€Purkinje cell synapse in immature rats. Journal of Physiology, 2003, 549, 75-92.	1.3	58
33	Probing TARP Modulation of AMPA Receptor Conductance with Polyamine Toxins. Journal of Neuroscience, 2011, 31, 7511-7520.	1.7	58
34	Channel properties reveal differential expression of TARPed and TARPless AMPARs in stargazer neurons. Nature Neuroscience, 2012, 15, 853-861.	7.1	55
35	TARP Î³-7 selectively enhances synaptic expression of calcium-permeable AMPARs. Nature Neuroscience, 2013, 16, 1266-1274.	7.1	45
36	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

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37	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
38	Ca²⁺â€permeable AMPA receptors and their auxiliary subunits in synaptic plasticity and disease. Journal of Physiology, 2021, 599, 2655-2671.	1.3	38
39	Acidâ€sensing ion channel 1a drives AMPA receptor plasticity following ischaemia and acidosis in hippocampal CA1 neurons. Journal of Physiology, 2015, 593, 4373-4386.	1.3	36
40	Restoration of transmitter release in botulinum-poisoned skeletal muscle. Brain Research, 1976, 110, 194-198.	1.1	30
41	Influence of agonist concentration on AMPA and kainate channels in CA1 pyramidal cells in rat hippocampal slices. Journal of Physiology, 2006, 573, 371-394.	1.3	29
42	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
43	Dual Effects of TARP Î³-2 on Glutamate Efficacy Can Account for AMPA Receptor Autoinactivation. Cell Reports, 2017, 20, 1123-1135.	2.9	28
44	Homomeric GluA2(R) AMPA receptors can conduct when desensitized. Nature Communications, 2019, 10, 4312.	5.8	22
45	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
46	Patch-clamp recording from single glutamate-receptor channels. Trends in Pharmacological Sciences, 1987, 8, 218-224.	4.0	18
47	Glutamate-Receptor Channels in Mammalian Glial Cells. Annals of the New York Academy of Sciences, 1991, 633, 458-474.	1.8	14
48	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
49	Synaptic noise and transmitter action at nerve-muscle junctions. Trends in Neurosciences, 1981, 4, 1-3.	4.2	13
50	Lithium acts as a potentiator of AMPAR currents in hippocampal CA1 cells by selectively increasing channel open probability. Journal of Physiology, 2010, 588, 3933-3941.	1.3	11
51	AMPA Receptorsâ€"Another Twist?. Science, 2010, 327, 1463-1465.	6.0	10
52	Single-channel mechanisms underlying the function, diversity and plasticity of AMPA receptors. Neuropharmacology, 2021, 198, 108781.	2.0	7
53	Desensitization and models of receptorâ€channel activation. Journal of Physiology, 2010, 588, 1395-1397.	1.3	6
54	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

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55	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
56	The First 50 Years of Molecular Pharmacology. Molecular Pharmacology, 2015, 88, 139-140.	1.0	4
57	Glutamate Receptor Auxiliary Subunits and Interacting Protein Partners in the Cerebellum. , 2013, , 853-879.		1
58	Multiple Subconductance States of Tarped AMPA Receptors Revealed by Slow Dissociation of Antagonist. Biophysical Journal, 2017, 112, 418a.	0.2	1
59	Glutamate Receptor Auxiliary Subunits and Interacting Protein Partners in the Cerebellum. , 2022, , 929-955.		0