Dimitri M Kullmann

List of Publications by Year in descending order

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308 papers 17,158 citations

68 h-index 17592 121 g-index

333 all docs 333 docs citations

333 times ranked 15970 citing authors

#	Article	IF	CITATIONS
1	N-methyl-d-aspartate antibody encephalitis: temporal progression of clinical and paraclinical observations in a predominantly non-paraneoplastic disorder of both sexes. Brain, 2010, 133, 1655-1667.	7.6	900
2	Tonically active GABAA receptors: modulating gain and maintaining the tone. Trends in Neurosciences, 2004, 27, 262-269.	8.6	698
3	Extrasynaptic Glutamate Diffusion in the Hippocampus: Ultrastructural Constraints, Uptake, and Receptor Activation. Journal of Neuroscience, 1998, 18, 3158-3170.	3.6	405
4	Extrasynaptic Glutamate Spillover in the Hippocampus: Dependence on Temperature and the Role of Active Glutamate Uptake. Neuron, 1997, 18, 281-293.	8.1	380
5	GABA uptake regulates cortical excitability via cell type–specific tonic inhibition. Nature Neuroscience, 2003, 6, 484-490.	14.8	366
6	Human epilepsy associated with dysfunction of the brain P/Q-type calcium channel. Lancet, The, 2001, 358, 801-807.	13.7	340
7	Amplitude fluctuations of. Neuron, 1994, 12, 1111-1120.	8.1	316
8	A novel mutation in the human voltage-gated potassium channel gene (Kv1.1) associates with episodic ataxia type 1 and sometimes with partial epilepsy. Brain, 1999, 122, 817-825.	7.6	314
9	Oscillatory multiplexing of population codes for selective communication in the mammalian brain. Nature Reviews Neuroscience, 2014, 15, 111-122.	10.2	314
10	Extrasynaptic glutamate spillover in the hippocampus: evidence and implications. Trends in Neurosciences, 1998, 21, 8-14.	8.6	302
11	Long-term potentiation is associated with increases in quantal content and quantal amplitude. Nature, 1992, 357, 240-244.	27.8	281
12	Long-term synaptic plasticity in hippocampal interneurons. Nature Reviews Neuroscience, 2007, 8, 687-699.	10.2	270
13	Ca2+ Entry via postsynaptic voltage-sensitive Ca2+ channels can transiently potentiate excitatory synaptic transmission in the hippocampus. Neuron, 1992, 9, 1175-1183.	8.1	261
14	LTP of AMPA and NMDA Receptor–Mediated Signals: Evidence for Presynaptic Expression and Extrasynaptic Glutamate Spill-Over. Neuron, 1996, 17, 461-474.	8.1	252
15	A genetically encoded fluorescent sensor for in vivo imaging of GABA. Nature Methods, 2019, 16, 763-770.	19.0	242
16	Oscillations and Filtering Networks Support Flexible Routing of Information. Neuron, 2010, 67, 308-320.	8.1	231
17	Multiple and Plastic Receptors Mediate Tonic GABAA Receptor Currents in the Hippocampus. Journal of Neuroscience, 2005, 25, 10016-10024.	3.6	227
18	Anti-Hebbian Long-Term Potentiation in the Hippocampal Feedback Inhibitory Circuit. Science, 2007, 315, 1262-1266.	12.6	219

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19	Optogenetic and Potassium Channel Gene Therapy in a Rodent Model of Focal Neocortical Epilepsy. Science Translational Medicine, 2012, 4, 161ra152.	12.4	216
20	Plasticity of Inhibition. Neuron, 2012, 75, 951-962.	8.1	198
21	Presynaptic, extrasynaptic and axonal GABAA receptors in the CNS: where and why?. Progress in Biophysics and Molecular Biology, 2005, 87, 33-46.	2.9	193
22	Dysfunction of the brain calcium channel CaV2.1 in absence epilepsy and episodic ataxia. Brain, 2004, 127, 2682-2692.	7.6	191
23	Monosynaptic GABAergic Signaling from Dentate to CA3 with a Pharmacological and Physiological Profile Typical of Mossy Fiber Synapses. Neuron, 2001, 29, 703-715.	8.1	189
24	Activation of AMPA, Kainate, and Metabotropic Receptors at Hippocampal Mossy Fiber Synapses. Neuron, 1998, 21, 561-570.	8.1	187
25	NR2B-Containing Receptors Mediate Cross Talk among Hippocampal Synapses. Journal of Neuroscience, 2004, 24, 4767-4777.	3.6	179
26	Modulation of GABAergic Signaling among Interneurons by Metabotropic Glutamate Receptors. Neuron, 2000, 25, 663-672.	8.1	170
27	Geometric and viscous components of the tortuosity of the extracellular space in the brain. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 8975-8980.	7.1	169
28	The neuronal channelopathies. Brain, 2002, 125, 1177-1195.	7.6	161
29	Voltage sensor charge loss accounts for most cases of hypokalemic periodic paralysis. Neurology, 2009, 72, 1544-1547.	1.1	160
30	Mutations in SLC12A5 in epilepsy of infancy with migrating focal seizures. Nature Communications, 2015, 6, 8038.	12.8	160
31	<i>PRRT2</i> gene mutations. Neurology, 2012, 79, 2115-2121.	1.1	159
32	AMPA receptor GluA2 subunit defects are a cause of neurodevelopmental disorders. Nature Communications, 2019, 10, 3094.	12.8	150
33	Hebbian LTP in feed-forward inhibitory interneurons and the temporal fidelity of input discrimination. Nature Neuroscience, 2005, 8, 916-924.	14.8	149
34	Progressive Motor Neuron Pathology and the Role of Astrocytes in a Human Stem Cell Model of VCP-Related ALS. Cell Reports, 2017, 19, 1739-1749.	6.4	146
35	The site of expression of NMDA receptor-dependent LTP: New fuel for an old fire. Neuron, 1995, 15, 997-1002.	8.1	144
36	Kainate receptor-dependent axonal depolarization and action potential initiation in interneurons. Nature Neuroscience, 2001, 4, 718-723.	14.8	142

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37	GABAA Receptors at Hippocampal Mossy Fibers. Neuron, 2003, 39, 961-973.	8.1	142
38	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. Molecular Therapy, 2020, 28, 235-253.	8.2	135
39	Differential triggering of spontaneous glutamate release by P/Q-, N- and R-type Ca2+ channels. Nature Neuroscience, 2013, 16, 1754-1763.	14.8	130
40	The clinical and genetic heterogeneity of paroxysmal dyskinesias. Brain, 2015, 138, 3567-3580.	7.6	129
41	Chemical–genetic attenuation of focal neocortical seizures. Nature Communications, 2014, 5, 3847.	12.8	118
42	Hippocampal synapses: do they talk to their neighbours?. Trends in Neurosciences, 1999, 22, 382-388.	8.6	115
43	Synaptically released glutamate reduces gamma -aminobutyric acid (GABA)ergic inhibition in the hippocampus via kainate receptors. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 9932-9937.	7.1	113
44	Outwardly Rectifying Tonically Active GABA _A Receptors in Pyramidal Cells Modulate Neuronal Offset, Not Gain. Journal of Neuroscience, 2009, 29, 15341-15350.	3.6	111
45	Neurological Channelopathies. Annual Review of Neuroscience, 2010, 33, 151-172.	10.7	109
46	Chloride channel myotonia: exon 8 hot-spot for dominant-negative interactions. Brain, 2007, 130, 3265-3274.	7.6	106
47	Episodic ataxia type 1: A neuronal potassium channelopathy. Neurotherapeutics, 2007, 4, 258-266.	4.4	106
48	Nanoscale-Targeted Patch-Clamp Recordings of Functional Presynaptic Ion Channels. Neuron, 2013, 79, 1067-1077.	8.1	103
49	Presynaptic GABAA receptors enhance transmission and LTP induction at hippocampal mossy fiber synapses. Nature Neuroscience, 2010, 13, 431-438.	14.8	102
50	Clinical relevance of serum antibodies to extracellular $<$ i>N $<$ li>-methyl-d-aspartate receptor epitopes. Journal of Neurology, Neurosurgery and Psychiatry, 2015, 86, 708-713.	1.9	97
51	Neurological channelopathies: new insights into disease mechanisms and ion channel function. Journal of Physiology, 2010, 588, 1823-1827.	2.9	95
52	Oscillatory dynamics in the hippocampus support dentate gyrus–CA3 coupling. Nature Neuroscience, 2012, 15, 763-768.	14.8	95
53	Knockout of NMDA-receptors from parvalbumin interneurons sensitizes to schizophrenia-related deficits induced by MK-801. Translational Psychiatry, 2016, 6, e778-e778.	4.8	91
54	Endogenous Zinc Inhibits GABAA Receptors in a Hippocampal Pathway. Journal of Neurophysiology, 2004, 91, 1091-1096.	1.8	88

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55	Anti-N-methyl-D-aspartate receptor antibodies: A potentially treatable cause of encephalitis in the intensive care unit. Critical Care Medicine, 2010, 38, 679-682.	0.9	88
56	Mutations in the Neuronal Vesicular SNARE VAMP2 Affect Synaptic Membrane Fusion and Impair Human Neurodevelopment. American Journal of Human Genetics, 2019, 104, 721-730.	6.2	88
57	GABA and GABAA receptors at hippocampal mossy fibre synapses. European Journal of Neuroscience, 2003, 18, 931-941.	2.6	87
58	Nerve excitability studies characterize KV1.1 fast potassium channel dysfunction in patients with episodic ataxia type 1. Brain, 2010, 133, 3530-3540.	7.6	87
59	Role of Ionotropic Glutamate Receptors in Long-Term Potentiation in Rat Hippocampal CA1 Oriens-Lacunosum Moleculare Interneurons. Journal of Neuroscience, 2009, 29, 939-950.	3.6	85
60	Genetic and functional characterisation of the P/Q calcium channel in episodic ataxia with epilepsy. Journal of Physiology, 2010, 588, 1905-1913.	2.9	85
61	LTP and LTD in cortical GABAergic interneurons: Emerging rules and roles. Neuropharmacology, 2011, 60, 712-719.	4.1	83
62	Spillover and synaptic cross talk mediated by glutamate and GABA in the mammalian brain. Progress in Brain Research, 2000, 125, 339-351.	1.4	82
63	Presynaptic Kainate Receptors in the Hippocampus. Neuron, 2001, 32, 561-564.	8.1	81
64	Interneuron networks in the hippocampus. Current Opinion in Neurobiology, 2011, 21, 709-716.	4.2	81
65	Autoimmune synaptopathies. Nature Reviews Neuroscience, 2016, 17, 103-117.	10.2	81
66	In vivo CRISPRa decreases seizures and rescues cognitive deficits in a rodent model of epilepsy. Brain, 2020, 143, 891-905.	7.6	79
67	Epilepsy Gene Therapy Using an Engineered Potassium Channel. Journal of Neuroscience, 2019, 39, 3159-3169.	3.6	78
68	Andersen–Tawil syndrome. Neurology, 2005, 65, 1083-1089.	1.1	77
69	KCC2 overexpression prevents the paradoxical seizure-promoting action of somatic inhibition. Nature Communications, 2019, 10, 1225.	12.8	75
70	Application of long single-stranded DNA donors in genome editing: generation and validation of mouse mutants. BMC Biology, 2018, 16, 70.	3.8	74
71	The role of mammalian ionotropic receptors in synaptic plasticity: LTP, LTD and epilepsy. Cellular and Molecular Life Sciences, 2000, 57, 1551-1561.	5.4	73
72	Efficient "Communication through Coherence―Requires Oscillations Structured to Minimize Interference between Signals. PLoS Computational Biology, 2012, 8, e1002760.	3.2	73

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73	Reduction by baclofen of monosynaptic EPSPs in lumbosacral motoneurones of the anaesthetized cat Journal of Physiology, 1989, 416, 539-556.	2.9	71
74	Neurological phenotype and synaptic function in mice lacking the CaV1.3 \hat{l}_{\pm} subunit of neuronal L-type voltage-dependent Ca2+ channels. Neuroscience, 2003, 120, 435-442.	2.3	71
75	Genetic neurological channelopathies: molecular genetics and clinical phenotypes. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, jnnp-2015-311233.	1.9	71
76	GABAergic Interneurons in Seizures: Investigating Causality With Optogenetics. Neuroscientist, 2019, 25, 344-358.	3.5	71
77	Action potential broadening in a presynaptic channelopathy. Nature Communications, 2016, 7, 12102.	12.8	70
78	Electric Fields Due to Synaptic Currents Sharpen Excitatory Transmission. Science, 2008, 319, 1845-1849.	12.6	69
79	Target-Cell Specificity of Kainate Autoreceptor and Ca ²⁺ -Store-Dependent Short-Term Plasticity at Hippocampal Mossy Fiber Synapses. Journal of Neuroscience, 2008, 28, 13139-13149.	3.6	69
80	Cholinergic Axons Modulate GABAergic Signaling among Hippocampal Interneurons via Postsynaptic Â7 Nicotinic Receptors. Journal of Neuroscience, 2007, 27, 5683-5693.	3.6	68
81	Gene therapy in epilepsyâ€"is it time for clinical trials?. Nature Reviews Neurology, 2014, 10, 300-304.	10.1	67
82	Focal cortical seizures start as standing waves and propagate respecting homotopic connectivity. Nature Communications, 2017, 8, 217.	12.8	67
83	Neurological disorders caused by inherited ion-channel mutations. Lancet Neurology, The, 2002, 1, 157-166.	10.2	66
84	Cortical inhibition, pH and cell excitability in epilepsy: what are optimal targets for antiepileptic interventions?. Journal of Physiology, 2013, 591, 765-774.	2.9	64
85	Clinical, pathological and functional characterization of riboflavin-responsive neuropathy. Brain, 2017, 140, 2820-2837.	7.6	64
86	Dysfunction of NaV1.4, a skeletal muscle voltage-gated sodium channel, in sudden infant death syndrome: a case-control study. Lancet, The, 2018, 391, 1483-1492.	13.7	63
87	Long-term potentiation and dual-component quantal signaling in the dentate gyrus. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 4702-4707.	7.1	62
88	Optogenetic and chemogenetic therapies for epilepsy. Neuropharmacology, 2020, 168, 107751.	4.1	62
89	Spike-timing dependent plasticity in inhibitory circuits. Frontiers in Synaptic Neuroscience, 2010, 2, 8.	2.5	61
90	Outcome of ventilatory support for acute respiratory failure in motor neurone disease. Journal of Neurology, Neurosurgery and Psychiatry, 2002, 72, 752-756.	1.9	60

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91	Variable K + channel subunit dysfunction in inherited mutations of KCNA1. Journal of Physiology, 2002, 538, 5-23.	2.9	60
92	Analog Modulation of Mossy Fiber Transmission Is Uncoupled from Changes in Presynaptic Ca ²⁺ . Journal of Neuroscience, 2008, 28, 7765-7773.	3 . 6	60
93	Endogenous Neurotrophin-3 Regulates Short-Term Plasticity at Lateral Perforant Path–Granule Cell Synapses. Journal of Neuroscience, 1998, 18, 8730-8739.	3.6	59
94	Glutamatergic Modulation of GABAergic Signaling Among Hippocampal Interneurons: Novel Mechanisms Regulating Hippocampal Excitability. Epilepsia, 2002, 43, 174-178.	5.1	59
95	Independent Regulation of Basal Neurotransmitter Release Efficacy by Variable Ca2+ Influx and Bouton Size at Small Central Synapses. PLoS Biology, 2012, 10, e1001396.	5 . 6	58
96	Plasticity of GABA _B Receptor-Mediated Heterosynaptic Interactions at Mossy Fibers After Status Epilepticus. Journal of Neuroscience, 2003, 23, 11382-11391.	3.6	58
97	NMDA receptorâ€dependent longâ€ŧerm potentiation in mouse hippocampal interneurons shows a unique dependence on Ca ²⁺ /calmodulinâ€dependent kinases. Journal of Physiology, 2007, 584, 885-894.	2.9	56
98	Large scale calcium channel gene rearrangements in episodic ataxia and hemiplegic migraine: implications for diagnostic testing. Journal of Medical Genetics, 2009, 46, 786-791.	3.2	56
99	Extracellular glutamate diffusion determines the occupancy of glutamate receptors at CA1 synapses in the hippocampus. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 395-402.	4.0	55
100	Reduction by general anaesthetics of group la excitatory postsynaptic potentials and currents in the cat spinal cord Journal of Physiology, 1989, 412, 277-296.	2.9	54
101	Ih-mediated depolarization enhances the temporal precision of neuronal integration. Nature Communications, 2011, 2, 199.	12.8	54
102	<i>PDXK</i> mutations cause polyneuropathy responsive to pyridoxal 5′â€phosphate supplementation. Annals of Neurology, 2019, 86, 225-240.	5. 3	54
103	Late-onset episodic ataxia type 2 due to an in-frame insertion in CACNA1A. Neurology, 2005, 65, 944-946.	1.1	52
104	Hippocampal–prefrontal coherence mediates working memory and selective attention at distinct frequency bands and provides a causal link between schizophrenia and its risk gene GRIA1. Translational Psychiatry, 2019, 9, 142.	4.8	51
105	Epileptogenesis Is Associated With Enhanced Glutamatergic Transmission in the Perforant Path. Journal of Neurophysiology, 2006, 95, 1213-1220.	1.8	50
106	Episodic ataxia type 1 mutations in the KCNA1 gene impair the fast inactivation properties of the human potassium channels $\text{Kv}1.4-1.1/\text{Kv}\hat{l}^21.1$ and $\text{Kv}1.4-1.1/\text{Kv}\hat{l}^21.2$. European Journal of Neuroscience, 2006, 24, 3073-3083.	2.6	50
107	Biochemical autoregulatory gene therapy for focal epilepsy. Nature Medicine, 2018, 24, 1324-1329.	30.7	47
108	Glycine receptor autoantibodies disrupt inhibitory neurotransmission. Brain, 2019, 142, 3398-3410.	7.6	47

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109	Thymectomy: role in the treatment of myasthenia gravis. Journal of Neurology, 2013, 260, 1798-1801.	3.6	46
110	Clinical, genetic, neurophysiological and functional study of new mutations in episodic ataxia type 1. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, 1107-1112.	1.9	46
111	Applications of the expectation-maximization algorithm to quantal analysis of postsynaptic potentials. Journal of Neuroscience Methods, 1989, 30, 231-245.	2.5	44
112	Optogenetic approaches to treat epilepsy. Journal of Neuroscience Methods, 2016, 260, 215-220.	2.5	44
113	Olanzapine: A potent agonist at the hM4D(Gi) DREADD amenable to clinical translation of chemogenetics. Science Advances, 2019, 5, eaaw1567.	10.3	44
114	Biallelic mutations in neurofascin cause neurodevelopmental impairment and peripheral demyelination. Brain, 2019, 142, 2948-2964.	7.6	43
115	Group I mGluR Agonist-Evoked Long-Term Potentiation in Hippocampal Oriens Interneurons. Journal of Neuroscience, 2011, 31, 5777-5781.	3.6	42
116	Dendritic NMDA receptors in parvalbumin neurons enable strong and stable neuronal assemblies. ELife, $2019,8,.$	6.0	42
117	Myasthenia and related disorders of the neuromuscular junction. Journal of Neurology, Neurosurgery and Psychiatry, 2010, 81, 850-857.	1.9	41
118	Roles of distinct glutamate receptors in induction of antiâ€Hebbian longâ€ŧerm potentiation. Journal of Physiology, 2008, 586, 1481-1486.	2.9	40
119	Clinical neurophysiology of the episodic ataxias: Insights into ion channel dysfunction in vivo. Clinical Neurophysiology, 2009, 120, 1768-1776.	1.5	40
120	Nongenetic factors influence severity of episodic ataxia type 1 in monozygotic twins. Neurology, 2010, 75, 367-372.	1.1	40
121	Silent synapses: what are they telling us about long-term potentiation?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 727-733.	4.0	38
122	Episodic ataxia type 1 mutations differentially affect neuronal excitability and transmitter release. DMM Disease Models and Mechanisms, 2009, 2, 612-619.	2.4	38
123	NMDA receptor-dependent function and plasticity in inhibitory circuits. Neuropharmacology, 2013, 74, 23-31.	4.1	38
124	Designer receptor technology for the treatment of epilepsy. EBioMedicine, 2019, 43, 641-649.	6.1	38
125	Alternative Splicing Modulates Inactivation of Type 1 Voltage-gated Sodium Channels by Toggling an Amino Acid in the First S3-S4 Linker. Journal of Biological Chemistry, 2011, 286, 36700-36708.	3.4	37
126	Imaging pathological activities of human brain tissue in organotypic culture. Journal of Neuroscience Methods, 2018, 298, 33-44.	2.5	36

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127	Non-genomic effects of sex hormones on CLC-1 may contribute to gender differences in myotonia congenita. Neuromuscular Disorders, 2008, 18, 869-872.	0.6	32
128	Heterogeneity and Specificity of Presynaptic Ca2+ Current Modulation by mGluRs at Individual Hippocampal Synapses. Cerebral Cortex, 2004, 14, 748-758.	2.9	31
129	Kv1.1 channelopathy abolishes presynaptic spike width modulation by subthreshold somatic depolarization. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2395-2400.	7.1	31
130	Editorial. Brain, 2015, 138, 1-1.	7.6	30
131	Pathogenic potential of antibodies to the <scp>GABA_B</scp> receptor. Epilepsia Open, 2017, 2, 355-359.	2.4	30
132	Mutations in Membrin/ GOSR2 Reveal Stringent Secretory Pathway Demands of Dendritic Growth and Synaptic Integrity. Cell Reports, 2017, 21, 97-109.	6.4	29
133	Functional Characterization of a Novel Mutation in KCNA1 in Episodic Ataxia Type 1 Associated with Epilepsy. Annals of the New York Academy of Sciences, 1999, 868, 442-446.	3.8	28
134	Functional characterization of compound heterozygosity for GlyR $\hat{l}\pm 1$ mutations in the startle disease hyperekplexia. European Journal of Neuroscience, 2002, 16, 186-196.	2.6	28
135	Short- and long-term depression at glutamatergic synapses on hippocampal interneurons by group I mGluR activation. Neuropharmacology, 2011, 60, 748-756.	4.1	28
136	Induction of Anti-Hebbian LTP in CA1 Stratum Oriens Interneurons: Interactions between Group I Metabotropic Glutamate Receptors and M1 Muscarinic Receptors. Journal of Neuroscience, 2015, 35, 13542-13554.	3.6	28
137	Novel therapies for epilepsy in the pipeline. Epilepsy and Behavior, 2019, 97, 282-290.	1.7	28
138	What's wrong with the amygdala in temporal lobe epilepsy?. Brain, 2011, 134, 2800-2801.	7.6	27
139	Do Mossy Fibers Release GABA?. Epilepsia, 2002, 43, 196-202.	5.1	26
140	Admission to neurological intensive care: who, when, and why?. Journal of Neurology, Neurosurgery and Psychiatry, 2003, 74, 2iii-9.	1.9	26
141	Personalized translational epilepsy research $\hat{a} \in \mathbb{C}^n$ Novel approaches and future perspectives. Epilepsy and Behavior, 2017, 76, 13-18.	1.7	26
142	Can N-Methyl-D-Aspartate Receptor Hypofunction in Schizophrenia Be Localized to an Individual Cell Type?. Frontiers in Psychiatry, 2019, 10, 835.	2.6	26
143	Monosynaptic EPSPs in cat lumbosacral motoneurones from group la afferents and fibres descending in the spinal cord Journal of Physiology, 1989, 412, 43-63.	2.9	25
144	The Inherited Episodic Ataxias: How Well Do We Understand the Disease Mechanisms?. Neuroscientist, 2001, 7, 80-88.	3.5	25

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145	Myasthenia gravis – treatment of acute severe exacerbations in the intensive care unit results in a favourable longâ€ŧerm prognosis. European Journal of Neurology, 2014, 21, 171-173.	3.3	25
146	Premature stop codons in a facilitating EF-hand splice variant of CaV2.1 cause episodic ataxia type 2. Neurobiology of Disease, 2008, 32, 10-15.	4.4	24
147	Editorial. Brain, 2016, 139, 1-1.	7.6	24
148	Spider toxin inhibits gating pore currents underlying periodic paralysis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4495-4500.	7.1	24
149	Febrile convulsions: a 'benign' condition?. Nature Medicine, 1999, 5, 871-872.	30.7	23
150	Relative picrotoxin insensitivity distinguishes ionotropic GABA receptor-mediated IPSCs in hippocampal interneurons. Neuropharmacology, 2002, 43, 726-736.	4.1	23
151	Slow channel congenital myasthenic syndrome responsive to a combination of fluoxetine and salbutamol. Muscle and Nerve, 2013, 47, 279-282.	2.2	23
152	Optogenetic induction of the schizophrenia-related endophenotype of ventral hippocampal hyperactivity causes rodent correlates of positive and cognitive symptoms. Scientific Reports, 2018, 8, 12871.	3.3	22
153	Loss of <i>Frrs1 </i> disrupts synaptic AMPA receptor function, and results in neurodevelopmental, motor, cognitive and electrographical abnormalities. DMM Disease Models and Mechanisms, 2019, 12, .	2.4	22
154	The Mother of All Battles 20 years on: is LTP expressed pre―or postsynaptically?. Journal of Physiology, 2012, 590, 2213-2216.	2.9	21
155	Long-term potentiation in hippocampal oriens interneurons: postsynaptic induction, presynaptic expression and evaluation of candidate retrograde factors. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130133.	4.0	21
156	Expanding the Phenotype and Genetic Defects Associated with the <i><scp>GOSR</scp>2</i> <fi>Gene. Movement Disorders Clinical Practice, 2015, 2, 271-273.</fi>	1.5	21
157	Open letter to prime minister David Cameron and health secretary Andrew Lansley. BMJ: British Medical Journal, 2010, 341, c6466-c6466.	2.3	21
158	Synapsin- and Actin-Dependent Frequency Enhancement in Mouse Hippocampal Mossy Fiber Synapses. Cerebral Cortex, 2009, 19, 511-523.	2.9	20
159	A tortuous and viscous route to understanding diffusion in the brain. Trends in Neurosciences, 1998, 21, 469-470.	8.6	19
160	Quantal analysis using maximum entropy noise deconvolution. Journal of Neuroscience Methods, 1992, 44, 47-57.	2.5	18
161	In vivo loss of slow potassium channel activity in individuals with benign familial neonatal epilepsy in remission. Brain, 2012, 135, 3144-3152.	7.6	18
162	lonotropic receptors at hippocampal mossy fibers: roles in axonal excitability, synaptic transmission, and plasticity. Frontiers in Neural Circuits, 2012, 6, 112.	2.8	17

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163	Tâ€type calcium channels contribute to NMDA receptor independent synaptic plasticity in hippocampal regularâ€spiking oriensâ€alveus interneurons. Journal of Physiology, 2017, 595, 3449-3458.	2.9	17
164	Comment on "Role of NMDA Receptor Subtypes in Governing the Direction of Hippocampal Synaptic Plasticity". Science, 2004, 305, 1912b-1912b.	12.6	16
165	Myasthenia gravis and neuromyelitis opica: A causal link. Multiple Sclerosis and Related Disorders, 2013, 2, 233-237.	2.0	16
166	Lambert-Eaton syndrome IgG inhibits transmitter release via P/Q Ca ²⁺ channels. Neurology, 2015, 84, 575-579.	1.1	16
167	Another migraine gene. Lancet, The, 2005, 366, 345-346.	13.7	15
168	CD8+ encephalitis: a severe but treatable HIV-related acute encephalopathy. Practical Neurology, 2017, 17, 42-46.	1.1	15
169	Impaired Preâ€Motor Circuit Activity and Movement in a <i>Drosophila</i> Model of <scp><i>KCNMA1</i> </scp> â€Linked Dyskinesia. Movement Disorders, 2021, 36, 1158-1169.	3.9	15
170	Analogue closed-loop optogenetic modulation of hippocampal pyramidal cells dissociates gamma frequency and amplitude. ELife, 2018, 7, .	6.0	15
171	Genetics of epilepsy. Journal of Neurology, Neurosurgery and Psychiatry, 2002, 73, 32ii-35.	1.9	14
172	Personalized translational epilepsy research $\hat{a}\in$ " Novel approaches and future perspectives. Epilepsy and Behavior, 2017, 76, 7-12.	1.7	14
173	De novo <i>KCNA2</i> mutations cause hereditary spastic paraplegia. Annals of Neurology, 2017, 81, 326-328.	5.3	13
174	Editorial. Brain, 2017, 140, 1-1.	7.6	13
175	The Enlightened Brain: Novel Imaging Methods Focus on Epileptic Networks at Multiple Scales. Frontiers in Cellular Neuroscience, 2018, 12, 82.	3.7	13
176	Myotonia in a patient with a mutation in an S4 arginine residue associated with hypokalaemic periodic paralysis and a concomitant synonymous CLCN1 mutation. Scientific Reports, 2019, 9, 17560.	3.3	13
177	Neither too loud nor too quiet. Nature, 1999, 399, 111-112.	27.8	12
178	Synaptic and extrasynaptic roles of glutamate in the mammalian hippocampus. Acta Physiologica Scandinavica, 1999, 166, 79-83.	2.2	11
179	Central nervous system histoplasmosis in an immunocompetent patient. Journal of Neurology, 2010, 257, 1931-1933.	3.6	11
180	Release of Neurotransmitters. , 2014, , 443-488.		11

#	Article	IF	CITATIONS
181	In vivoimpact of presynaptic calcium channel dysfunction on motor axons in episodic ataxia type 2. Brain, 2016, 139, 380-391.	7.6	11
182	Editorial. Brain, 2019, 142, 1-1.	7.6	11
183	Nicotinic receptor activation induces NMDA receptor independent longâ€term potentiation of glutamatergic signalling in hippocampal oriens interneurons. Journal of Physiology, 2021, 599, 667-676.	2.9	11
184	Dysfunction of the CaV2.1 calcium channel in cerebellar ataxias. F1000 Biology Reports, 2010, 2, .	4.0	11
185	Presynaptic fluctuations and release-independent depression. Nature Neuroscience, 2006, 9, 1091-1093.	14.8	10
186	Activity Clamp Provides Insights into Paradoxical Effects of the Anti-Seizure Drug Carbamazepine. Journal of Neuroscience, 2017, 37, 5484-5495.	3.6	10
187	A PATIENT WITH EPISODIC ATAXIA AND PARAMYOTONIA CONGENITA DUE TO MUTATIONS IN <i>KCNA1</i> AND <i>SCN4A</i> Neurology, 2009, 73, 993-995.	1.1	9
188	Late recurrent thymoma in myasthenia gravis: a case series: Table 1. Journal of Neurology, Neurosurgery and Psychiatry, 2012, 83, 1030-1031.	1.9	9
189	Gene therapy in status epilepticus. Epilepsia, 2013, 54, 43-45.	5.1	9
190	Changes in the severity and subtype of Guillain-Barr \tilde{A} © syndrome admitted to a specialist Neuromedical ICU over a 25Âyear period. Journal of Neurology, 2017, 264, 564-569.	3.6	9
191	Semiology, clustering, periodicity and natural history of seizures in an experimental occipital cortical epilepsy model. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	9
192	Translating genetic and functional data into clinical practice: a series of 223 families with myotonia. Brain, 2022, 145, 607-620.	7.6	8
193	AMPA Receptor Attrition in Long-Term Depression. Neuron, 1999, 24, 288-290.	8.1	7
194	Gene-Environment Interaction in a Conditional NMDAR-Knockout Model of Schizophrenia. Frontiers in Behavioral Neuroscience, 2018, 12, 332.	2.0	7
195	The effects of lesions on autogenetic inhibition in the decerebrate cat Journal of Physiology, 1989, 419, 611-625.	2.9	6
196	Brainstem encephalopathy with stimulus-sensitive myoclonus leading to respiratory arrest, but with recovery: A description of two cases and review of the literature. Movement Disorders, 1996, 11, 715-718.	3.9	6
197	Just a graze? Cephalic tetanus presenting as a stroke mimic. Practical Neurology, 2014, 14, 39-41.	1.1	6
198	Editorial. Brain, 2018, 141, 1-1.	7.6	6

#	Article	IF	CITATIONS
199	Autogenetic inhibition from contraction receptors in the decerebrate cat Journal of Physiology, 1989, 419, 589-610.	2.9	5
200	Release of Neurotransmitters. , 2004, , 197-244.		5
201	Catastrophic primary antiphospholipid syndrome presenting as status epilepticus. Journal of Neurology, Neurosurgery and Psychiatry, 2005, 76, 1607-1608.	1.9	5
202	A 'sustain pedal' in the hippocampus?. Nature Neuroscience, 2010, 13, 146-148.	14.8	5
203	Interneurons go plastic. Neuropharmacology, 2011, 60, 711.	4.1	5
204	Neurological Manifestation of Vitamin B12 Deficiency. American Journal of Medicine, 2010, 123, e1-e2.	1.5	4
205	Cell-Free Expression of Sodium Channel Domains for Pharmacology Studies. Noncanonical Spider Toxin Binding Site in the Second Voltage-Sensing Domain of Human Nav1.4 Channel. Frontiers in Pharmacology, 2019, 10, 953.	3.5	4
206	A retrospective cohort study of super-refractory status epilepticus in a tertiary neuro-ICU setting. Seizure: the Journal of the British Epilepsy Association, 2021, 85, 90-94.	2.0	4
207	Bortezomib for anti-NMDAR encephalitis following daclizumab treatment in a patient with multiple sclerosis. BMJ Neurology Open, 2021, 3, e000096.	1.6	4
208	Role of the synaptic microenvironment in functional modification of synaptic transmission. Neurophysiology, 1999, 31, 79-81.	0.3	3
209	Benign neonatal convulsions and spontaneous network activity in the developing brain: is there a link?. Journal of Physiology, 2008, 586, 5281-5281.	2.9	3
210	How much inhibition in an epileptiform burst?. Journal of Physiology, 2010, 588, 17-18.	2.9	3
211	GABA _A receptor mutations in epilepsy (Commentary on Lachanceâ€Touchette <i>et al.</i>). European Journal of Neuroscience, 2011, 34, 235-236.	2.6	3
212	Dysfunction of the brain calcium channel CaV2.1 in absence epilepsy and episodic ataxiaâ€"authors' response. Brain, 2005, 128, E33-E33.	7.6	2
213	Sodium channelopathy of peripheral nerve: tightening the genotype-phenotype relationship. Brain, 2009, 132, 1690-1692.	7.6	2
214	Tonic GABAA receptor-mediated signaling. Epilepsia, 2010, 51, 14-14.	5.1	2
215	Sodium channel mutations and epilepsy: Association and causation. Experimental Neurology, 2010, 226, 8-10.	4.1	2
216	171â€Myasthenic crisis in the intensive care unit: a 10-year review. Journal of Neurology, Neurosurgery and Psychiatry, 2012, 83, e1.128-e1.	1.9	2

#	Article	IF	CITATIONS
217	Hypokalemic periodic paralysis: an omega pore mutation affects inactivation. Channels, 2015, 9, 161-161.	2.8	2
218	Editorial. Brain, 2017, 140, 1817-1817.	7.6	2
219	Rhombencephalitis and Myeloradiculitis Caused by a European Subtype of Tick-Borne Encephalitis Virus. Emerging Infectious Diseases, 2019, 25, 2317-2319.	4.3	2
220	Disorders of Consciousness, Intensive Care Neurology and Sleep. , 0, , 723-769.		1
221	Density functional and spectroscopic studies of nitrogen inversion in substituted dizocilpines. Journal of Physical Organic Chemistry, 2009, 22, 607-612.	1.9	1
222	Computational Sophistication at a Single GABAergic Connection. Neuron, 2009, 63, 716-718.	8.1	1
223	N-methyl-D-aspartate limbic encephalitis: Diagnosis should respect well-recognized criteria. Critical Care Medicine, 2010, 38, 1615-1616.	0.9	1
224	PAW31 Clinical and genetic spectrum of the episodic ataxias: the UK perspective. Journal of Neurology, Neurosurgery and Psychiatry, 2010, 81, e32-e32.	1.9	1
225	Nongenetic factors influence severity of episodic ataxia type 1 in monozygotic twins. Neurology, 2011 , 76 , $490-490$.	1.1	1
226	170 Diaphragmatic weakness following thymectomy: due to myasthenia gravis or phrenic nerve injury?. Journal of Neurology, Neurosurgery and Psychiatry, 2012, 83, e1.127-e1.	1.9	1
227	Vasculitis of the central and peripheral nervous system mimicking brain death. Clinical Neurology and Neurosurgery, 2012, 114, 399-401.	1.4	1
228	Mapping out hippocampal inhibition. Nature Neuroscience, 2012, 15, 346-347.	14.8	1
229	Lentiviral expression of GAD67 and CCK promoter-driven opsins to target interneuronsin vitroandin vivo. Journal of Gene Medicine, 2016, 18, 27-37.	2.8	1
230	Editorial. Brain, 2016, 139, 2815-2815.	7.6	1
231	Editorial. Brain, 2016, 139, 303-303.	7.6	1
232	Editorial. Brain, 2017, 140, 1171-1171.	7.6	1
233	Editorial. Brain, 2019, 142, 833-833.	7.6	1
234	CHAPTER 10. Optogenetic and Chemogenetic Tools for Drug Discovery in Schizophrenia. RSC Drug Discovery Series, 2015, , 234-272.	0.3	1

#	Article	IF	CITATIONS
235	Variable Loudness at Individual Excitatory Synapses. Neuron, 1999, 22, 206-207.	8.1	O
236	Inherited Channelopathies of the CNS: Lessons for Clinical Neurology., 2005, , 293-302.		0
237	D.P.2.09 Non-genomic effects of sex hormones on ClC-1 may contribute to gender differences in myotonia congenita. Neuromuscular Disorders, 2008, 18, 745.	0.6	0
238	D.P.2.12 Episodic ataxia type 1 in identical twins. Neuromuscular Disorders, 2008, 18, 746.	0.6	0
239	PONM09 Thymectomy: its role in the management of myasthenia gravis. Journal of Neurology, Neurosurgery and Psychiatry, 2010, 81, e62-e63.	1.9	0
240	PONM08 Late recurrent thymoma: a case series. Journal of Neurology, Neurosurgery and Psychiatry, 2010, 81, e62-e62.	1.9	0
241	The Functional Effect of R1648H, a Sodium Channel Mutation that Causes Generalized Epilepsy with Febrile Seizures Plus in Splice Variants of SCN1A. Biophysical Journal, 2010, 98, 309a.	0.5	0
242	172â€An unusual case of congenital myasthenic syndrome: the mechanism for treatment response. Journal of Neurology, Neurosurgery and Psychiatry, 2012, 83, e1.129-e1.	1.9	0
243	N-methyl-D-aspartate receptor antibody-mediated encephalitis. British Journal of Hospital Medicine (London, England: 2005), 2012, 73, 472-473.	0.5	0
244	Channelopathies., 0,, 121-135.		0
245	LAMBERT EATON MYASTHENIC SYNDROME ANTIBODIES DECREASE SYNAPTIC VESICLE EXOCYTOSIS IN NEURONAL CULTURES. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, e2.151-e2.	1.9	0
246	JUST A GRAZE?. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, e2.159-e2.	1.9	0
247	Editorial. Brain, 2014, 137, 307-307.	7.6	0
248	Editorial. Brain, 2014, 137, 973-973.	7.6	0
249	Editorial. Brain, 2014, 137, 1273-1273.	7.6	0
250	Editorial. Brain, 2014, 137, 1853-1853.	7.6	0
251	Editorial. Brain, 2014, 137, 2109-2109.	7.6	0
252	Editorial. Brain, 2014, 137, 3099-3099.	7.6	О

#	Article	IF	Citations
253	Editorial. Brain, 2014, 137, 645-645.	7.6	O
254	Editorial. Brain, 2014, 137, 2871-2871.	7.6	0
255	Editorial. Brain, 2014, 137, 1569-1569.	7.6	0
256	PATHOLOGICAL MECHANISMS OF GLYCINE RECEPTOR ANTIBODIES. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, e4.12-e4.	1.9	0
257	CHANGING FORMS OF GUILLAIN-BARRé SYNDROME IN NEURO-ICU. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, e4.85-e4.	1.9	0
258	Pathological mechanisms in patients with antibodies to glycine receptors. Journal of Neuroimmunology, 2014, 275, 97.	2.3	0
259	Editorial. Brain, 2014, 137, 2399-2399.	7.6	0
260	Study on presynaptic action potential waveform in hippocampal neuronal culture models of episodic ataxia type 1 using scanning ion conductance microscopy. Journal of the Neurological Sciences, 2015, 357, e233.	0.6	0
261	Presynaptic channelopathies causing ataxia and migraine. Journal of the Neurological Sciences, 2015, 357, e493.	0.6	0
262	Editorial. Brain, 2015, 138, 237-237.	7.6	0
263	Editorial. Brain, 2015, 138, 1443-1443.	7.6	0
264	Editorial. Brain, 2015, 138, 1765-1765.	7.6	0
265	Editorial. Brain, 2015, 138, 2113-2113.	7.6	0
266	Editorial. Brain, 2015, 138, 2801-2801.	7.6	0
267	Editorial. Brain, 2015, 138, 827-827.	7.6	0
268	Editorial. Brain, 2015, 138, 3131-3131.	7.6	0
269	Editorial. Brain, 2016, 139, 3051-3051.	7.6	0
270	Modulation of axonal signalling in type 1 episodic ataxia. Lancet, The, 2016, 387, S104.	13.7	0

#	Article	IF	Citations
271	Editorial. Brain, 2016, 139, 1311-1311.	7.6	O
272	Editorial. Brain, 2016, 139, 2335-2335.	7.6	0
273	Editorial. Brain, 2016, 139, 2103-2103.	7.6	0
274	Editorial. Brain, 2016, 139, 1621-1621.	7.6	0
275	Editorial. Brain, 2016, 139, 1001-1001.	7.6	0
276	Editorial. Brain, 2016, 139, 1865-1865.	7.6	0
277	Editorial. Brain, 2016, 139, 641-641.	7.6	0
278	Editorial. Brain, 2017, 140, 2521-2521.	7.6	0
279	Editorial. Brain, 2017, 140, 2253-2253.	7.6	0
280	PO006â€Encephalitis on the neuro-icu: changing patterns. Journal of Neurology, Neurosurgery and Psychiatry, 2017, 88, A14.2-A14.	1.9	0
281	PO221â€Pathological mechanisms of glycine receptor antibodies. Journal of Neurology, Neurosurgery and Psychiatry, 2017, 88, A70.2-A70.	1.9	0
282	PO007â€Neuro-critical care: an 11-year experience. Journal of Neurology, Neurosurgery and Psychiatry, 2017, 88, A14.3-A14.	1.9	0
283	Editorial. Brain, 2017, 140, 2763-2763.	7.6	0
284	PO190â€Anti-musk positive myasthenia gravis at a tertiary centre. Journal of Neurology, Neurosurgery and Psychiatry, 2017, 88, A61.3-A61.	1.9	0
285	Editorial. Brain, 2017, 140, 2065-2065.	7.6	0
286	Editorial. Brain, 2017, 140, 515-515.	7.6	0
287	Editorial. Brain, 2018, 141, 323-323.	7.6	0
288	Editorial. Brain, 2018, 141, 1235-1235.	7.6	0

#	Article	IF	Citations
289	Editorial. Brain, 2018, 141, 935-935.	7.6	О
290	Editorial. Brain, 2018, 141, 621-621.	7.6	0
291	Editorial. Brain, 2018, 141, 3279-3279.	7.6	0
292	Editorial. Brain, 2018, 141, 1887-1887.	7.6	0
293	Editorial. Brain, 2018, 141, 2823-2823.	7.6	0
294	Editorial. Brain, 2018, 141, 3083-3083.	7.6	0
295	Editorial. Brain, 2018, 141, 2231-2231.	7.6	0
296	Editorial. Brain, 2019, 142, 2169-2169.	7.6	0
297	Editorial. Brain, 2019, 142, 1847-1847.	7.6	0
298	Editorial. Brain, 2019, 142, 2545-2545.	7.6	0
299	Editorial. Brain, 2019, 142, 3315-3315.	7.6	0
300	Editorial. Brain, 2019, 142, 2893-2894.	7.6	0
301	Editorial. Brain, 2019, 142, 1165-1165.	7.6	0
302	Editorial. Brain, 2019, 142, 1489-1490.	7.6	0
303	Editorial. Brain, 2019, 142, 227-227.	7.6	0
304	Editorial. Brain, 2019, 142, 489-489.	7.6	0
305	Epilepsy genetics. Drugs of Today, 2003, 39, 725.	2.4	0
306	Statistical and Computational Methods for Quantal Analysis of Synaptic Transmission. Methods in Neurosciences, 1992, , 363-375.	0.5	0

#	Article	IF	CITATIONS
307	Editorial. Brain, 2018, 141, 2533.	7.6	0
308	114†Neuro-critical care: a 4-year experience. Journal of Neurology, Neurosurgery and Psychiatry, 2022, 93, A46.2-A46.	1.9	O