Andrew J Trevelyan

List of Publications by Year
in descending order

52 papers	2,871 citations	236925 25 h-index	243625 44 g-index
65 all docs	65 docs citations	65 times ranked	2949 citing authors

#	Article	IF	Citations
1	PV-specific loss of the transcriptional coactivator PGC-1Î± slows down the evolution of epileptic activity in an acute ictogenic model. Journal of Neurophysiology, 2022, 127, 86-98.	1.8	3
2	Genetically encoded sensors for Chloride concentration. Journal of Neuroscience Methods, 2022, 368, 109455.	2.5	16
3	Neuronal Firing and Waveform Alterations through Ictal Recruitment in Humans. Journal of Neuroscience, 2021, 41, 766-779.	3.6	21
4	A Closed-Loop Optogenetic Platform. Frontiers in Neuroscience, 2021, 15, 718311.	2.8	4
5	Modulation of brain cation-Clâ^' cotransport via the SPAK kinase inhibitor ZT-1a. Nature Communications, 2020, 11, 78.	12.8	69
6	A multiorganism pipeline for antiseizure drug discovery: Identification of chlorothymol as a novel Î³â€aminobutyric acidergic anticonvulsant. Epilepsia, 2020, 61, 2106-2118.	5.1	9
7	Seizure pathways change on circadian and slower timescales in individual patients with focal epilepsy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11048-11058.	7.1	36
8	Chloride dynamics alter the input-output properties of neurons. PLoS Computational Biology, 2020, 16, e1007932.	3.2	28
9	Divisive gain modulation enables flexible and rapid entrainment in a neocortical microcircuit model. Journal of Neurophysiology, 2020, 123, 1133-1143.	1.8	2
10	Propagating Activity in Neocortex, Mediated by Gap Junctions and Modulated by Extracellular Potassium. ENeuro, 2020, 7, ENEURO.0387-19.2020.	1.9	3
11	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
12	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
13	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
14	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
15	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
16	Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.		0
17	Divergent paths to seizureâ€like events. Physiological Reports, 2019, 7, e14226.	1.7	23
18	Excitatory GABAergic signalling is associated with benzodiazepine resistance in status epilepticus. Brain, 2019, 142, 3482-3501.	7.6	67

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19	Multiscale recordings reveal the dynamic spatial structure of human seizures. Neurobiology of Disease, 2019, 127, 303-311.	4.4	50
20	Feedforward inhibition ahead of ictal wavefronts is provided by both parvalbuminâ€•and somatostatinâ€expressing interneurons. Journal of Physiology, 2019, 597, 2297-2314.	2.9	47
21	Regionâ€specific differences and areal interactions underlying transitions in epileptiform activity. Journal of Physiology, 2019, 597, 2079-2096.	2.9	23
22	Stressâ€testing the brain to understand its breaking points. Journal of Physiology, 2018, 596, 2033-2034.	2.9	5
23	Simultaneous profiling of activity patterns in multiple neuronal subclasses. Journal of Neuroscience Methods, 2018, 303, 16-29.	2.5	5
24	Graphical user interface for simultaneous profiling of activity patterns in multiple neuronal subclasses. Data in Brief, 2018, 20, 226-233.	1.0	1
25	Pyramidal cell activity levels affect the polarity of activity-induced gene transcription changes in interneurons. Journal of Neurophysiology, 2018, 120, 2358-2367.	1.8	13
26	Mechanisms underlying different onset patterns of focal seizures. PLoS Computational Biology, 2017, 13, e1005475.	3.2	60
27	Do Cortical Circuits Need Protecting from Themselves?. Trends in Neurosciences, 2016, 39, 502-511.	8.6	24
28	The ictal wavefront is the spatiotemporal source of discharges during spontaneous human seizures. Nature Communications, 2016, 7, 11098.	12.8	124
29	Cl-out is a novel cooperative optogenetic tool for extruding chloride from neurons. Nature Communications, 2016, 7, 13495.	12.8	31
30	Opportunities for improving animal welfare in rodent models of epilepsy and seizures. Journal of Neuroscience Methods, 2016, 260, 2-25.	2.5	93
31	Gain control through divisive inhibition prevents abrupt transition to chaos in a neural mass model. Physical Review E, 2015, 92, 032723.	2.1	15
32	The Role of Inhibition in Epileptic Networks. Journal of Clinical Neurophysiology, 2015, 32, 227-234.	1.7	25
33	Moderate acute alcohol intoxication has minimal effect on surround suppression measured with a motion direction discrimination task. Journal of Vision, 2015, 15, 5-5.	0.3	43
34	The Contribution of Raised Intraneuronal Chloride to Epileptic Network Activity. Journal of Neuroscience, 2015, 35, 7715-7726.	3.6	116
35	Neural Stem Cells in the Adult Subventricular Zone Oxidize Fatty Acids to Produce Energy and Support Neurogenic Activity. Stem Cells, 2015, 33, 2306-2319.	3.2	111
36	Seizure localization using ictal phase-locked high gamma. Neurology, 2015, 84, 2320-2328.	1.1	95

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37	Single unit action potentials in humans and the effect of seizure activity. Brain, 2015, 138, 2891-2906.	7.6	81
38	How inhibition influences seizure propagation. Neuropharmacology, 2013, 69, 45-54.	4.1	105
39	The contribution of synaptic location to inhibitory gain control in pyramidal cells. Physiological Reports, 2013, 1, e00067.	1.7	58
40	Ictal high frequency oscillations distinguish two types of seizure territories in humans. Brain, 2013, 136, 3796-3808.	7.6	188
41	Why do some brains seize? Molecular, cellular and network mechanisms. Journal of Physiology, 2013, 591, 751-752.	2.9	0
42	The information content of physiological and epileptic brain activity. Journal of Physiology, 2013, 591, 799-805.	2.9	20
43	Evidence of an inhibitory restraint of seizure activity in humans. Nature Communications, 2012, 3, 1060.	12.8	365
44	Cellular mechanisms of high frequency oscillations in epilepsy: On the diverse sources of pathological activities. Epilepsy Research, 2011, 97, 308-317.	1.6	55
45	Mitochondrial DNA mutations affect calcium handling in differentiated neurons. Brain, 2010, 133, 787-796.	7.6	43
46	The Direct Relationship between Inhibitory Currents and Local Field Potentials. Journal of Neuroscience, 2009, 29, 15299-15307.	3.6	61
47	Feedforward Inhibition Contributes to the Control of Epileptiform Propagation Speed. Journal of Neuroscience, 2007, 27, 3383-3387.	3.6	244
48	The Source of Afterdischarge Activity in Neocortical Tonicâ€“Clonic Epilepsy. Journal of Neuroscience, 2007, 27, 13513-13519.	3.6	57
49	Modular Propagation of Epileptiform Activity: Evidence for an Inhibitory Veto in Neocortex. Journal of Neuroscience, 2006, 26, 12447-12455.	3.6	309
50	Does inhibition balance excitation in neocortex?. Progress in Biophysics and Molecular Biology, 2005, 87, 109-143.	2.9	36
51	Detailed passive cable models of layer 2/3 pyramidal cells in rat visual cortex at different temperatures. Journal of Physiology, 2002, 539, 623-636.	2.9	59
52	Intrinsic Cortical Mechanisms which Oppose Epileptiform Activity: Implications for Seizure Prediction. , 0, , 149-161.		1