

# Andrew J Trevelyan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2063362/publications.pdf>

Version: 2024-02-01

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  | Evidence of an inhibitory restraint of seizure activity in humans. <i>Nature Communications</i> , 2012, 3, 1060.   | 12.8 | 365       |
| 2  | Modular Propagation of Epileptiform Activity: Evidence for an Inhibitory Veto in Neocortex. <i>Journal of Neuroscience</i> , 2006, 26, 12447-12455.                | 3.6  | 309       |
| 3  | Feedforward Inhibition Contributes to the Control of Epileptiform Propagation Speed. <i>Journal of Neuroscience</i> , 2007, 27, 3383-3387.                         | 3.6  | 244       |
| 4  | Ictal high frequency oscillations distinguish two types of seizure territories in humans. <i>Brain</i> , 2013, 136, 3796-3808.                                     | 7.6  | 188       |
| 5  | The ictal wavefront is the spatiotemporal source of discharges during spontaneous human seizures. <i>Nature Communications</i> , 2016, 7, 11098.                   | 12.8 | 124       |
| 6  | The Contribution of Raised Intraneuronal Chloride to Epileptic Network Activity. <i>Journal of Neuroscience</i> , 2015, 35, 7715-7726.                             | 3.6  | 116       |
| 7  | Neural Stem Cells in the Adult Subventricular Zone Oxidize Fatty Acids to Produce Energy and Support Neurogenic Activity. <i>Stem Cells</i> , 2015, 33, 2306-2319. | 3.2  | 111       |
| 8  | How inhibition influences seizure propagation. <i>Neuropharmacology</i> , 2013, 69, 45-54.   | 4.1  | 105       |
| 9  | Seizure localization using ictal phase-locked high gamma. <i>Neurology</i> , 2015, 84, 2320-2328.  | 1.1  | 95        |
| 10 | Opportunities for improving animal welfare in rodent models of epilepsy and seizures. <i>Journal of Neuroscience Methods</i> , 2016, 260, 2-25.                    | 2.5  | 93        |
| 11 | Single unit action potentials in humans and the effect of seizure activity. <i>Brain</i> , 2015, 138, 2891-2906.   | 7.6  | 81        |
| 12 | Modulation of brain cation-Cl <sup>-</sup> cotransport via the SPAK kinase inhibitor ZT-1a. <i>Nature Communications</i> , 2020, 11, 78.                           | 12.8 | 69        |
| 13 | Excitatory GABAergic signalling is associated with benzodiazepine resistance in status epilepticus. <i>Brain</i> , 2019, 142, 3482-3501.                           | 7.6  | 67        |
| 14 | The Direct Relationship between Inhibitory Currents and Local Field Potentials. <i>Journal of Neuroscience</i> , 2009, 29, 15299-15307.                            | 3.6  | 61        |
| 15 | Mechanisms underlying different onset patterns of focal seizures. <i>PLoS Computational Biology</i> , 2017, 13, e1005475.  | 3.2  | 60        |
| 16 | Detailed passive cable models of layer 2/3 pyramidal cells in rat visual cortex at different temperatures. <i>Journal of Physiology</i> , 2002, 539, 623-636.      | 2.9  | 59        |
| 17 | The contribution of synaptic location to inhibitory gain control in pyramidal cells. <i>Physiological Reports</i> , 2013, 1, e00067.                               | 1.7  | 58        |
| 18 | The Source of Afterdischarge Activity in Neocortical Tonic-Clonic Epilepsy. <i>Journal of Neuroscience</i> , 2007, 27, 13513-13519.                                | 3.6  | 57        |

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|----|---|------|-----------|
| 19 | Cellular mechanisms of high frequency oscillations in epilepsy: On the diverse sources of pathological activities. <i>Epilepsy Research</i> , 2011, 97, 308-317.  | 1.6  | 55        |
| 20 | Multiscale recordings reveal the dynamic spatial structure of human seizures. <i>Neurobiology of Disease</i> , 2019, 127, 303-311.  | 4.4  | 50        |
| 21 | Feedforward inhibition ahead of ictal wavefronts is provided by both parvalbumin- and somatostatin-expressing interneurons. <i>Journal of Physiology</i> , 2019, 597, 2297-2314.  | 2.9  | 47        |
| 22 | Mitochondrial DNA mutations affect calcium handling in differentiated neurons. <i>Brain</i> , 2010, 133, 787-796.   | 7.6  | 43        |
| 23 | Moderate acute alcohol intoxication has minimal effect on surround suppression measured with a motion direction discrimination task. <i>Journal of Vision</i> , 2015, 15, 5-5.  | 0.3  | 43        |
| 24 | Does inhibition balance excitation in neocortex?. <i>Progress in Biophysics and Molecular Biology</i> , 2005, 87, 109-143.  | 2.9  | 36        |
| 25 | Seizure pathways change on circadian and slower timescales in individual patients with focal epilepsy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11048-11058. | 7.1  | 36        |
| 26 | Cl-out is a novel cooperative optogenetic tool for extruding chloride from neurons. <i>Nature Communications</i> , 2016, 7, 13495.  | 12.8 | 31        |
| 27 | Chloride dynamics alter the input-output properties of neurons. <i>PLoS Computational Biology</i> , 2020, 16, e1007932.   | 3.2  | 28        |
| 28 | The Role of Inhibition in Epileptic Networks. <i>Journal of Clinical Neurophysiology</i> , 2015, 32, 227-234.   | 1.7  | 25        |
| 29 | Do Cortical Circuits Need Protecting from Themselves?. <i>Trends in Neurosciences</i> , 2016, 39, 502-511.  | 8.6  | 24        |
| 30 | Divergent paths to seizure-like events. <i>Physiological Reports</i> , 2019, 7, e14226.   | 1.7  | 23        |
| 31 | Region-specific differences and areal interactions underlying transitions in epileptiform activity. <i>Journal of Physiology</i> , 2019, 597, 2079-2096.  | 2.9  | 23        |
| 32 | Neuronal Firing and Waveform Alterations through Ictal Recruitment in Humans. <i>Journal of Neuroscience</i> , 2021, 41, 766-779.   | 3.6  | 21        |
| 33 | The information content of physiological and epileptic brain activity. <i>Journal of Physiology</i> , 2013, 591, 799-805.   | 2.9  | 20        |
| 34 | Genetically encoded sensors for Chloride concentration. <i>Journal of Neuroscience Methods</i> , 2022, 368, 109455.   | 2.5  | 16        |
| 35 | Gain control through divisive inhibition prevents abrupt transition to chaos in a neural mass model. <i>Physical Review E</i> , 2015, 92, 032723.   | 2.1  | 15        |
| 36 | Pyramidal cell activity levels affect the polarity of activity-induced gene transcription changes in interneurons. <i>Journal of Neurophysiology</i> , 2018, 120, 2358-2367.  | 1.8  | 13        |

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|----|---|-----|-----------|
| 37 | A multiorganism pipeline for antiseizure drug discovery: Identification of chlorothymol as a novel $\beta$ -aminobutyric acidergic anticonvulsant. <i>Epilepsia</i> , 2020, 61, 2106-2118.          | 5.1 | 9         |
| 38 | Stressâ€Testing the brain to understand its breaking points. <i>Journal of Physiology</i> , 2018, 596, 2033-2034.   | 2.9 | 5         |
| 39 | Simultaneous profiling of activity patterns in multiple neuronal subclasses. <i>Journal of Neuroscience Methods</i> , 2018, 303, 16-29.   | 2.5 | 5         |
| 40 | A Closed-Loop Optogenetic Platform. <i>Frontiers in Neuroscience</i> , 2021, 15, 718311.  | 2.8 | 4         |
| 41 | Propagating Activity in Neocortex, Mediated by Gap Junctions and Modulated by Extracellular Potassium. <i>ENeuro</i> , 2020, 7, ENEURO.0387-19.2020.  | 1.9 | 3         |
| 42 | PV-specific loss of the transcriptional coactivator PGC-1 $\beta$ slows down the evolution of epileptic activity in an acute ictogenic model. <i>Journal of Neurophysiology</i> , 2022, 127, 86-98. | 1.8 | 3         |
| 43 | Divisive gain modulation enables flexible and rapid entrainment in a neocortical microcircuit model. <i>Journal of Neurophysiology</i> , 2020, 123, 1133-1143.                                      | 1.8 | 2         |
| 44 | Graphical user interface for simultaneous profiling of activity patterns in multiple neuronal subclasses. <i>Data in Brief</i> , 2018, 20, 226-233.   | 1.0 | 1         |
| 45 | Intrinsic Cortical Mechanisms which Oppose Epileptiform Activity: Implications for Seizure Prediction. , 0, , 149-161.  |     | 1         |
| 46 | Why do some brains seize? Molecular, cellular and network mechanisms. <i>Journal of Physiology</i> , 2013, 591, 751-752.  | 2.9 | 0         |
| 47 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |
| 48 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |
| 49 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |
| 50 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |
| 51 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |
| 52 | Chloride dynamics alter the input-output properties of neurons. , 2020, 16, e1007932.   |     | 0         |