

Peter L Carlen

List of Publications by Year in descending order

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203
papers

8,170
citations

38742

50
h-index

60623

81
g-index

207
all docs

207
docs citations

207
times ranked

7767
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced LTP in Mice Deficient in the AMPA Receptor GluR2. <i>Neuron</i> , 1996, 17, 945-956.	8.1	477
2	Gap junctions, synchrony and seizures. <i>Trends in Neurosciences</i> , 2000, 23, 68-74.	8.6	251
3	The 128-Channel Fully Differential Digital Integrated Neural Recording and Stimulation Interface. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2010, 4, 149-161.	4.0	240
4	Reduced Cortical Synaptic Plasticity and GluR1 Expression Associated with Fragile X Mental Retardation Protein Deficiency. <i>Molecular and Cellular Neurosciences</i> , 2002, 19, 138-151.	2.2	235
5	Modulation of High-Voltage-Activated Calcium Channels in Dentate Granule Cells by Topiramate. <i>Epilepsia</i> , 2000, 41, 52-60.	5.1	221
6	Cell-permeant Ca ²⁺ chelators reduce early excitotoxic and ischemic neuronal injury in vitro and in vivo. <i>Neuron</i> , 1993, 11, 221-235.	8.1	215
7	Specific Gap Junctions Enhance the Neuronal Vulnerability to Brain Traumatic Injury. <i>Journal of Neuroscience</i> , 2002, 22, 644-653.	3.6	200
8	Prevalence and significance of neurocognitive dysfunction in hepatitis C in the absence of correlated risk factors. <i>Hepatology</i> , 2005, 41, 801-808.	7.3	188
9	Morphological alterations in rat CA1 hippocampal pyramidal cell dendrites resulting from chronic ethanol consumption and withdrawal. <i>Journal of Comparative Neurology</i> , 1984, 225, 111-118.	1.6	161
10	256-Channel Neural Recording and Delta Compression Microsystem With 3D Electrodes. <i>IEEE Journal of Solid-State Circuits</i> , 2009, 44, 995-1005.	5.4	160
11	The role of gap junctions in seizures. <i>Brain Research Reviews</i> , 2000, 32, 235-241.	9.0	155
12	Secondary Ca ²⁺ overload indicates early neuronal injury which precedes staining with viability indicators. <i>Brain Research</i> , 1993, 607, 319-323.	2.2	139
13	Anticonvulsant Actions of Gap Junctional Blockers in an In Vitro Seizure Model. <i>Journal of Neurophysiology</i> , 2002, 88, 1893-1902.	1.8	126
14	<i>In Vitro</i> Ischemia Promotes Glutamate-Mediated Free Radical Generation and Intracellular Calcium Accumulation in Hippocampal Pyramidal Neurons. <i>Journal of Neuroscience</i> , 1997, 17, 9085-9094.	3.6	120
15	Dynamics of Epileptic Phenomena Determined From Statistics of Ictal Transitions. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 524-532.	4.2	116
16	Free radical production correlates with cell death in an in vitro model of epilepsy. <i>European Journal of Neuroscience</i> , 2000, 12, 1431-1439.	2.6	111
17	Rail-to-Rail-Input Dual-Radio 64-Channel Closed-Loop Neurostimulator. <i>IEEE Journal of Solid-State Circuits</i> , 2017, , 1-18.	5.4	102
18	Synchronization of GABAergic interneuronal networks during seizure-like activity in the rat horizontal hippocampal slice. <i>European Journal of Neuroscience</i> , 1999, 11, 4110-4118.	2.6	98

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19	NMDA and quisqualate reduce a Ca-dependent K ⁺ current by a protein kinase-mediated mechanism. <i>Neuroscience Letters</i> , 1990, 112, 76-81.	2.1	97
20	Increased High-frequency Oscillations Precede in vitro Low-Mg ²⁺ Seizures. <i>Epilepsia</i> , 2005, 46, 1188-1197.	5.1	97
21	Changes in Neuronal Migration in Neocortex of Connexin43 Null Mutant Mice. <i>Journal of Neuropathology and Experimental Neurology</i> , 2003, 62, 304-314.	1.7	96
22	Brief activation of GABAergic interneurons initiates the transition to ictal events through post-inhibitory rebound excitation. <i>Neurobiology of Disease</i> , 2018, 109, 102-116.	4.4	94
23	Roles of gap junctions, connexins, and pannexins in epilepsy. <i>Frontiers in Physiology</i> , 2014, 5, 172.	2.8	90
24	Transition to Seizure: Ictal Discharge Is Preceded by Exhausted Presynaptic GABA Release in the Hippocampal CA3 Region. <i>Journal of Neuroscience</i> , 2012, 32, 2499-2512.	3.6	84
25	The Remarkably High Prevalence of Epilepsy and Seizure History in Fetal Alcohol Spectrum Disorders. <i>Alcoholism: Clinical and Experimental Research</i> , 2010, 34, 1084-1089.	2.4	82
26	Connexin 43 mimetic peptides inhibit spontaneous epileptiform activity in organotypic hippocampal slice cultures. <i>Experimental Neurology</i> , 2008, 210, 762-775.	4.1	81
27	Dynamics of intracellular calcium and free radical production during ischemia in pyramidal neurons. <i>Free Radical Biology and Medicine</i> , 2001, 31, 1216-1227.	2.9	80
28	Epileptiform activity in hippocampal slice cultures exposed chronically to bicuculline: increased gap junctional function and expression. <i>Journal of Neurochemistry</i> , 2003, 86, 687-699.	3.9	80
29	NMDA depolarizations and long-term potentiation are reduced in the aged rat neocortex. <i>Brain Research</i> , 1990, 530, 142-146.	2.2	77
30	Kindling-induced epilepsy alters calcium currents in granule cells of rat hippocampal slices. <i>Brain Research</i> , 1990, 531, 88-94.	2.2	76
31	Mechanism of Action and Persistence of Neuroprotection by Cell-Permeant Ca ²⁺ Chelators. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1994, 14, 911-923.	4.3	71
32	Mechanisms of Electrical Coupling Between Pyramidal Cells. <i>Journal of Neurophysiology</i> , 1997, 78, 3107-3116.	1.8	71
33	Hippocampal seizures alter the expression of the pannexin and connexin transcriptome. <i>Journal of Neurochemistry</i> , 2010, 112, 92-102.	3.9	71
34	Isolated vasculitis of the central nervous system in a patient with celiac disease. <i>American Journal of Medicine</i> , 1986, 81, 1092-1094.	1.5	69
35	The Control of Seizure-Like Activity in the Rat Hippocampal Slice. <i>Biophysical Journal</i> , 2003, 84, 687-695.	0.5	69
36	Mechanisms of Morphine Enhancement of Spontaneous Seizure Activity. <i>Anesthesia and Analgesia</i> , 2007, 105, 1729-1735.	2.2	69

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37	Early-stage attenuation of phase-amplitude coupling in the hippocampus and medial prefrontal cortex in a transgenic rat model of Alzheimer's disease. <i>Journal of Neurochemistry</i> , 2018, 144, 669-679.	3.9	69
38	Alcohol-Related Dementia in the Institutionalized Elderly. <i>Alcoholism: Clinical and Experimental Research</i> , 1994, 18, 1330-1334.	2.4	67
39	Differential Modulation of Synaptic Transmission by Calcium Chelators in Young and Aged Hippocampal CA1 Neurons: Evidence for Altered Calcium Homeostasis in Aging. <i>Journal of Neuroscience</i> , 1999, 19, 906-915.	3.6	67
40	Neurotransmitter Modulation of Gap Junctional Communication in the Rat Hippocampus. <i>European Journal of Neuroscience</i> , 1997, 9, 2522-2531.	2.6	65
41	Type III intermittency in human partial epilepsy. <i>European Journal of Neuroscience</i> , 1999, 11, 2571-2576.	2.6	65
42	Low-dose benzodiazepine neuronal inhibition: enhanced Ca ²⁺ -mediated K ⁺ -conductance. <i>Brain Research</i> , 1983, 271, 358-364.	2.2	62
43	General Anesthetics Inhibit Gap Junction Communication in Cultured Organotypic Hippocampal Slices. <i>Anesthesia and Analgesia</i> , 2006, 102, 1692-1698.	2.2	61
44	Defining regions of interest using cross-frequency coupling in extratemporal lobe epilepsy patients. <i>Journal of Neural Engineering</i> , 2015, 12, 026011.	3.5	61
45	Activation of large-conductance Ca ²⁺ -activated K ⁺ channels depresses basal synaptic transmission in the hippocampal CA1 area in APP (swe/ind) TgCRND8 mice. <i>Neurobiology of Aging</i> , 2010, 31, 591-604.	3.1	60
46	A submersion method to induce hypoxic damage in organotypic hippocampal cultures. <i>Journal of Neuroscience Methods</i> , 1999, 89, 25-31.	2.5	58
47	Cognitive effects of long-term benzodiazepine use in older adults. <i>Human Psychopharmacology</i> , 2003, 18, 51-57.	1.5	55
48	Vulnerability of glial cells to hydrogen peroxide in cultured hippocampal slices. <i>Brain Research</i> , 2008, 1198, 1-15.	2.2	55
49	Seizure-Induced Cell Death Produced by Repeated Tetanic Stimulation In Vitro: Possible Role of Endoplasmic Reticulum Calcium Stores. <i>Journal of Neurophysiology</i> , 1999, 81, 3054-3064.	1.8	53
50	Differential control of three after-hyperpolarizations in rat hippocampal neurones by intracellular calcium buffering. <i>Journal of Physiology</i> , 1999, 517, 201-216.	2.9	53
51	Transient Ischemia Induces an Early Decrease of Synaptic Transmission in CA1 Neurons of Rat Hippocampus: Electrophysiologic Study in Brain Slices. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1997, 17, 955-966.	4.3	52
52	Chronic <i>in vitro</i> ketosis is neuroprotective but not anti-convulsant. <i>Journal of Neurochemistry</i> , 2010, 113, 826-835.	3.9	50
53	Hypoglycemic seizures during transient hypoglycemia exacerbate hippocampal dysfunction. <i>Neurobiology of Disease</i> , 2007, 26, 646-660.	4.4	47
54	Classification of Pre-Clinical Seizure States Using Scalp EEG Cross-Frequency Coupling Features. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2440-2449.	4.2	46

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55	Postsynaptic and presynaptic effects of the calcium chelator BAPTA on synaptic transmission in rat hippocampal dentate granule neurons. <i>Brain Research</i> , 1991, 555, 319-325.	2.2	45
56	Changes in Membrane and Synaptic Properties of Thalamocortical Circuitry Caused by Hydrogen Peroxide. <i>Journal of Neurophysiology</i> , 1998, 80, 1317-1326.	1.8	45
57	Brain-Silicon Interface for High-Resolution in vitro Neural Recording. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2007, 1, 56-62.	4.0	45
58	Neurovascular unit remodelling in the subacute stage of stroke recovery. <i>NeuroImage</i> , 2017, 146, 869-882.	4.2	45
59	Diversity amongst human cortical pyramidal neurons revealed via their sag currents and frequency preferences. <i>Nature Communications</i> , 2021, 12, 2497.	12.8	44
60	Calcium chelation improves spatial learning and synaptic plasticity in aged rats. <i>Experimental Neurology</i> , 2006, 197, 291-300.	4.1	43
61	Cellular mechanisms of cobalt-induced hippocampal epileptiform discharges. <i>Epilepsia</i> , 2009, 50, 99-115.	5.1	41
62	Rearrangement of centromeric satellite DNA in hippocampal neurons exhibiting long-term potentiation. <i>Molecular Brain Research</i> , 1992, 14, 101-108.	2.3	40
63	Hippocampal excitability is increased in aged mice. <i>Experimental Neurology</i> , 2013, 247, 710-719.	4.1	40
64	Neurocognitive and Seizure Outcomes of Selective Amygdalohippocampectomy versus Anterior Temporal Lobectomy for Mesial Temporal Lobe Epilepsy. <i>Epilepsy Research & Treatment</i> , 2014, 2014, 1-8.	1.4	37
65	Epilepsy as a manifestation of a multistate network of oscillatory systems. <i>Neurobiology of Disease</i> , 2019, 130, 104488.	4.4	37
66	Acute Postischemic Seizures Are Associated with Increased Mortality and Brain Damage in Adult Mice. <i>Cerebral Cortex</i> , 2011, 21, 2863-2875.	2.9	36
67	Pannexin-1 channels in epilepsy. <i>Neuroscience Letters</i> , 2019, 695, 71-75.	2.1	36
68	Effect of the Thiol-oxidizing Agent, Diamide, on Acetylcholine Release at the Frog Endplate. <i>Nature: New Biology</i> , 1971, 233, 120-121.	4.5	35
69	Severe Hypoglycemia in a Juvenile Diabetic Rat Model: Presence and Severity of Seizures Are Associated with Mortality. <i>PLoS ONE</i> , 2013, 8, e83168.	2.5	35
70	Development of firing patterns and electrical properties in neurons of the rat ventrobasal thalamus. <i>Developmental Brain Research</i> , 1996, 91, 164-170.	1.7	34
71	Electrotonic coupling between stratum oriens interneurons in the intact in vitro mouse juvenile hippocampus. <i>Journal of Physiology</i> , 2004, 558, 825-839.	2.9	34
72	Transmembrane potential induced on the internal organelle by a time-varying magnetic field: a model study. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2010, 7, 12.	4.6	33

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73	Hungry Neurons: Metabolic Insights on Seizure Dynamics. International Journal of Molecular Sciences, 2017, 18, 2269.	4.1	32
74	Transmembrane potential induced in a spherical cell model under low-frequency magnetic stimulation. Journal of Neural Engineering, 2007, 4, 283-293.	3.5	31
75	Formic Acid, a Novel Metabolite of Chronic Ethanol Abuse, Causes Neurotoxicity, Which Is Prevented by Folic Acid. Alcoholism: Clinical and Experimental Research, 2007, 31, 2114-2120.	2.4	31
76	Curious and contradictory roles of glial connexins and pannexins in epilepsy. Brain Research, 2012, 1487, 54-60.	2.2	31
77	Patient awareness of seizures as documented in the epilepsy monitoring unit. Canadian Journal of Neuroscience Nursing, 2009, 31, 22-3.	0.2	30
78	Chapter 13 Neurotrauma/neurodegeneration and mitochondrial dysfunction. Progress in Brain Research, 2002, 137, 171-176.	1.4	29
79	Astrocytic gap junction blockade markedly increases extracellular potassium without causing seizures in the mouse neocortex. Neurobiology of Disease, 2017, 101, 1-7.	4.4	28
80	Increased Seizure Susceptibility of the Hippocampus Compared with the Neocortex of the Immature Mouse Brain in vitro. Epilepsia, 2005, 46, 356-366.	5.1	27
81	Epileptogenic Source Imaging Using Cross-Frequency Coupled Signals From Scalp EEG. IEEE Transactions on Biomedical Engineering, 2016, 63, 2607-2618.	4.2	27
82	27.3 All-wireless 64-channel 0.013mm ² /ch closed-loop neurostimulator with rail-to-rail DC offset removal. , 2017, , .		27
83	Imaging the Effects of β^2 -Hydroxybutyrate on Peri-Infarct Neurovascular Function and Metabolism. Stroke, 2018, 49, 2173-2181.	2.0	27
84	Delta-gamma phase-amplitude coupling as a biomarker of postictal generalized EEG suppression. Brain Communications, 2020, 2, fcaa182.	3.3	27
85	Reversibility of alcohol-related brain damage: Clinical and experimental observations. Acta Medica Scandinavica, 1987, 221, 19-26.	0.0	26
86	Transmembrane potential generated by a magnetically induced transverse electric field in a cylindrical axonal model. Medical and Biological Engineering and Computing, 2011, 49, 107-119.	2.8	25
87	Magnesium as an Effective Adjunct Therapy for Drug Resistant Seizures. Canadian Journal of Neurological Sciences, 2012, 39, 323-327.	0.5	25
88	Imaging brain activity during seizures in freely behaving rats using a miniature multi-modal imaging system. Biomedical Optics Express, 2016, 7, 3596.	2.9	25
89	Cardiorespiratory depression from brainstem seizure activity in freely moving rats. Neurobiology of Disease, 2020, 134, 104628.	4.4	25
90	Modeling genetic epileptic encephalopathies using brain organoids. EMBO Molecular Medicine, 2021, 13, e13610.	6.9	25

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91	Passive Neuronal Membrane Parameters: Comparison of Optimization and Peeling Methods. IEEE Transactions on Biomedical Engineering, 1986, BME-33, 1188-1196.	4.2	23
92	Analysis of Single K _{ATP} Channels in Mammalian Dentate Gyrus Granule Cells. Journal of Neurophysiology, 2000, 84, 2291-2301.	1.8	23
93	22.8 Adaptively Clock-Boosted Auto-Ranging Responsive Neurostimulator for Emerging Neuromodulation Applications. , 2019, , .		23
94	Video-EEG evidence of lateralized clinical features in primary generalized epilepsy with tonic-clonic seizures. Epileptic Disorders, 2003, 5, 149-56.	1.3	23
95	Antiepileptic efficacy of topiramate: assessment in two in vitro seizure models. Brain Research, 2000, 872, 20-28.	2.2	22
96	Prediction of Seizure Onset in an In-Vitro Hippocampal Slice Model of Epilepsy Using Gaussian-Based and Wavelet-Based Artificial Neural Networks. Annals of Biomedical Engineering, 2005, 33, 798-810.	2.5	22
97	The effects of high-frequency oscillations in hippocampal electrical activities on the classification of epileptiform events using artificial neural networks. Journal of Neural Engineering, 2006, 3, 9-20.	3.5	22
98	3-D Flexible Nano-Textured High-Density Microelectrode Arrays for High-Performance Neuro-Monitoring and Neuro-Stimulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 1072-1082.	4.9	22
99	Opamp-Less Sub-1/4W/Channel I ^o -Modulated Neural-ADC With Super-GI ^o Input Impedance. IEEE Journal of Solid-State Circuits, 2021, 56, 1565-1575.	5.4	22
100	Effects of variations in hippocampal slice preparation protocol on the electrophysiological stability, epileptogenicity and graded hypoxia responses of CA1 neurons. Brain Research, 1997, 775, 134-143.	2.2	21
101	The role of delta-modulated high frequency oscillations in seizure state classification. , 2013, 2013, 6595-8.		21
102	Mapping the coherence of ictal high frequency oscillations in human extratemporal lobe epilepsy. Epilepsia, 2015, 56, 393-402.	5.1	21
103	Hippocampal hyperexcitability in fetal alcohol spectrum disorder: Pathological sharp waves and excitatory/inhibitory synaptic imbalance. Experimental Neurology, 2016, 280, 70-79.	4.1	21
104	Local Field Potential-Based Programming: A Proof-of-Concept Pilot Study. Neuromodulation, 2022, 25, 271-275.	0.8	21
105	Electric Coupling in Epileptogenesis. Neuroscience Intelligence Unit, 1996, , 289-299.	0.5	21
106	Elevated potassium provides an ionic mechanism for deep brain stimulation in the hemiparkinsonian rat. European Journal of Neuroscience, 2013, 37, 231-241.	2.6	20
107	Acute, Withdrawal, and Chronic Alcohol Effects in Man: Event-Related Potential and Quantitative EEG Techniques. Annals of Medicine, 1990, 22, 333-339.	3.8	19
108	Pannexin-1 Deficiency Decreases Epileptic Activity in Mice. International Journal of Molecular Sciences, 2020, 21, 7510.	4.1	19

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109	General anesthetics attenuate gap junction coupling in P19 cell line. <i>Journal of Neuroscience Research</i> , 2005, 81, 746-752.	2.9	18
110	256-Channel Neural Recording Microsystem with On-Chip 3D Electrodes. <i>Digest of Technical Papers - IEEE International Solid-State Circuits Conference</i> , 2007, , .	0.0	18
111	Early Ischemia Enhances Action Potential-Dependent, Spontaneous Glutamatergic Responses in CA1 Neurons. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010, 30, 555-565.	4.3	18
112	Complexity and multifractality of neuronal noise in mouse and human hippocampal epileptiform dynamics. <i>Journal of Neural Engineering</i> , 2012, 9, 056008.	3.5	18
113	PHASE SYNCHRONIZATION OF NEURONAL NOISE IN MOUSE HIPPOCAMPAL EPILEPTIFORM DYNAMICS. <i>International Journal of Neural Systems</i> , 2013, 23, 1250033.	5.2	18
114	Artifact-Tolerant Opamp-Less Delta-Modulated Bidirectional Neuro-Interface. , 2018, , .		18
115	The excitatory effects of the specific benzodiazepine antagonist Ro14-7437, measured intracellularly in hippocampal CA1 cells. <i>Brain Research</i> , 1983, 271, 115-119.	2.2	17
116	System characterization of neuronal excitability in the hippocampus and its relevance to observed dynamics of spontaneous seizure-like transitions. <i>Journal of Neural Engineering</i> , 2010, 7, 036002.	3.5	17
117	Identification of brain regions of interest for epilepsy surgery planning using support vector machines. , 2015, 2015, 6590-3.		17
118	Online Prediction of Onsets of Seizure-like Events in Hippocampal Neural Networks Using Wavelet Artificial Neural Networks. <i>Annals of Biomedical Engineering</i> , 2006, 34, 282-294.	2.5	16
119	Complexity in Neuronal Noise Depends on Network Interconnectivity. <i>Annals of Biomedical Engineering</i> , 2011, 39, 1768-1778.	2.5	16
120	Wide field fluorescent imaging of extracellular spatiotemporal potassium dynamics in vivo. <i>NeuroImage</i> , 2015, 104, 110-116.	4.2	16
121	Mortality with brainstem seizures from focal 4-aminopyridine-induced recurrent hippocampal seizures. <i>Epilepsia</i> , 2017, 58, 1637-1644.	5.1	16
122	Raised Intracellular Calcium Contributes to Ischemia-Induced Depression of Evoked Synaptic Transmission. <i>PLoS ONE</i> , 2016, 11, e0148110.	2.5	16
123	Long-term potentiation of synaptic responses in the rat dentate gyrus is due to increased quantal content. <i>Neuroscience Letters</i> , 1991, 127, 169-172.	2.1	15
124	Late Auditory Evoked Potentials in Alcoholics.. <i>Annals of the New York Academy of Sciences</i> , 1991, 620, 73-81.	3.8	15
125	Ethanol Inhibits Gap-Junctional Coupling Between P19 Cells. <i>Alcoholism: Clinical and Experimental Research</i> , 2004, 28, 1284-1290.	2.4	15
126	A Wavelet Packet-Based Algorithm for the Extraction of Neural Rhythms. <i>Annals of Biomedical Engineering</i> , 2009, 37, 595-613.	2.5	15

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127	Isovaline, a rare amino acid, has anticonvulsant properties in two in vitro hippocampal seizure models by increasing interneuronal activity. <i>Epilepsia</i> , 2011, 52, 2084-2093.	5.1	15
128	Wavelet-based Gaussian-mixture hidden Markov model for the detection of multistage seizure dynamics: A proof-of-concept study. <i>BioMedical Engineering OnLine</i> , 2011, 10, 29.	2.7	15
129	A Potential Compensatory Role of Panx3 in the VNO of a Panx1 Knock Out Mouse Model. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 135.	2.9	15
130	Neurological Disorders Associated with WWOX Germline Mutations—A Comprehensive Overview. <i>Cells</i> , 2021, 10, 824.	4.1	15
131	Calcium and Sedative-Hypnotic Drug Actions. <i>International Review of Neurobiology</i> , 1988, 29, 161-189.	2.0	14
132	Changes in calcium currents during ethanol withdrawal in a genetic mouse model. <i>Brain Research</i> , 1994, 649, 305-309.	2.2	14
133	Spatial Coherence Profiles of Ictal High-Frequency Oscillations Correspond to Those of Interictal Low-Frequency Oscillations in the ECoG of Epileptic Patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 76-85.	4.2	14
134	Benzodiazepine Antagonists Reduce Epileptiform Discharges in Rat Hippocampal Slices. <i>Epilepsia</i> , 1996, 37, 1007-1014.	5.1	13
135	Enhanced isoflurane suppression of excitatory synaptic transmission in the aged rat hippocampus. <i>British Journal of Pharmacology</i> , 1998, 124, 1075-1082.	5.4	13
136	Extracellular Potassium and Seizures: Excitation, Inhibition and the Role of Ih. <i>International Journal of Neural Systems</i> , 2016, 26, 1650044.	5.2	13
137	Contributions of the Hippocampal CA3 Circuitry to Acute Seizures and Hyperexcitability Responses in Mouse Models of Brain Ischemia. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 278.	3.7	13
138	Deep Brain Stimulation rescues memory and synaptic activity in a rat model of global ischemia. <i>Journal of Neuroscience</i> , 2019, 39, 1222-18.	3.6	13
139	Serotonin agonist and antagonist actions in hippocampal CA1 neurons. <i>Canadian Journal of Physiology and Pharmacology</i> , 1990, 68, 586-595.	1.4	12
140	Oophorectomy Reduces Estradiol Levels and Long-Term Spontaneous Neurovascular Recovery in a Female Rat Model of Focal Ischemic Stroke. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 338.	2.9	12
141	Daily listening to Mozart reduces seizures in individuals with epilepsy: A randomized control study. <i>Epilepsia Open</i> , 2020, 5, 285-294.	2.4	12
142	Phencyclidine Ingestion: Drug Abuse and Psychosis. <i>Substance Use and Misuse</i> , 1981, 16, 749-758.	0.6	11
143	Biofouling-Resistant Impedimetric Sensor for Array High-Resolution Extracellular Potassium Monitoring in the Brain. <i>Biosensors</i> , 2016, 6, 53.	4.7	11
144	Intravenous Abuse of Propylhexedrine (Benedrex®) and the Risk of Brainstem Dysfunction in Young Adults. <i>Canadian Journal of Neurological Sciences</i> , 1986, 13, 337-339.	0.5	10

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145	Benzodiazepine-induced epileptiform activity in vitro. <i>Brain Research</i> , 1987, 437, 239-244.	2.2	10
146	Development and Characterization of Multisite Three-Dimensional Microprobes for Deep Brain Stimulation and Recording. <i>Journal of Microelectromechanical Systems</i> , 2011, 20, 1109-1118.	2.5	10
147	Modulation of the peri-infarct neurogliovascular function by delayed COX-1 inhibition. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 46, 505-517.	3.4	10
148	Generation and On-Demand Initiation of Acute Ictal Activity in Rodent and Human Tissue. <i>Journal of Visualized Experiments</i> , 2019, , .	0.3	10
149	Cellular Electrophysiological Actions of Ethanol on Mammalian Neurons in Brain Slices. <i>Annals of the New York Academy of Sciences</i> , 1991, 625, 17-25.	3.8	9
150	Changes in gap junction expression and function following ischemic injury of spinal cord white matter. <i>Journal of Neurophysiology</i> , 2014, 112, 2067-2075.	1.8	9
151	Differential expression of astrocytic connexins in a mouse model of prenatal alcohol exposure. <i>Neurobiology of Disease</i> , 2016, 91, 83-93.	4.4	8
152	Phase Coherent Currents Underlying Neocortical Seizure-Like State Transitions. <i>ENeuro</i> , 2019, 6, ENEURO.0426-18.2019.	1.9	8
153	Ethanol and spinal presynaptic inhibition in man. <i>Annals of Neurology</i> , 1977, 1, 478-480.	5.3	7
154	Seizure-like activity in the hypoglycemic rat: Lack of correlation with the electroencephalogram of free-moving animals. <i>Epilepsy Research</i> , 2009, 83, 243-248.	1.6	7
155	INFLUENCE OF CELLULAR PROPERTIES ON THE ELECTRIC FIELD DISTRIBUTION AROUND A SINGLE CELL. <i>Progress in Electromagnetics Research B</i> , 2012, 39, 141-161.	1.0	7
156	Continuous multi-modality brain imaging reveals modified neurovascular seizure response after intervention. <i>Biomedical Optics Express</i> , 2017, 8, 873.	2.9	7
157	Neocortical in vivo focal and spreading potassium responses and the influence of astrocytic gap junctional coupling. <i>Neurobiology of Disease</i> , 2021, 147, 105160.	4.4	7
158	Molecular Mechanisms of Free Radical Production and Protective Efficacies of Antioxidants in in Vitro Ischemia-Reperfusion. <i>Annals of the New York Academy of Sciences</i> , 1999, 893, 286-289.	3.8	6
159	Towards Real-Time In-Implant Epileptic Seizure Prediction. , 2006, 2006, 5476-9.		6
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