Vijayalakshmi Santhakumar

List of Publications by Year
in descending order

		318942	242451
59	2,358	23	47
papers	citations	h-index	g-index

67	67	67	2501
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Differential Activity-Dependent Increase in Synaptic Inhibition and Parvalbumin Interneuron Recruitment in Dentate Granule Cells and Semilunar Granule Cells. Journal of Neuroscience, 2022, 42, 1090-1103.	1.7	9
2	Long-Term Effects of Moderate Concussive Brain Injury During Adolescence on Synaptic and Tonic GABA Currents in Dentate Granule Cells and Semilunar Granule Cells. Frontiers in Neuroscience, 2022, 16, 800733.	1.4	2
3	Traumatic brain injury metabolome and mitochondrial impact after early stage Ru360 treatment. Mitochondrion, 2021, 57, 192-204.	1.6	6
4	ExBoX â€" a simple Boolean exclusion strategy to drive expression in neurons. Journal of Cell Science, 2021, 134, .	1.2	4
5	Reduced hippocampal inhibition and enhanced autism-epilepsy comorbidity in mice lacking neuropilin 2. Translational Psychiatry, 2021, 11, 537.	2.4	13
6	Kaempferol Treatment after Traumatic Brain Injury during Early Development Mitigates Brain Parenchymal Microstructure and Neural Functional Connectivity Deterioration at Adolescence. Journal of Neurotrauma, 2020, 37, 966-974.	1.7	15
7	Born to Be Wild: A Case for Targeting Ectopic Adult Born Granule Cells for Seizure Control. Epilepsy Currents, 2020, 20, 57-60.	0.4	0
8	From Plugging the Dam to Fueling the Firing: Platelets Breach the Barrier to Seize the Brain. Epilepsy Currents, 2020, 20, 300-302.	0.4	0
9	Dendritic morphology and inhibitory regulation distinguish dentate semilunar granule cells from granule cells through distinct stages of postnatal development. Brain Structure and Function, 2020, 225, 2841-2855.	1.2	12
10	Tollâ€like Receptor 4 Signaling in Neurons Enhances Calciumâ€Permeable AMPA Receptor Currents and Drives Postâ€Traumatic Epileptogenesis. Annals of Neurology, 2020, 87, 497-515.	2.8	36
11	Distinct cellular mediators drive the Janus faces of toll-like receptor 4 regulation of network excitability which impacts working memory performance after brain injury. Brain, Behavior, and Immunity, 2020, 88, 381-395.	2.0	12
12	Current exÂvivo and inÂvitro approaches to uncovering mechanisms of neurological dysfunction after traumatic brain injury. Current Opinion in Biomedical Engineering, 2020, 14, 18-24.	1.8	6
13	Alterations of Parenchymal Microstructure, Neuronal Connectivity, and Cerebrovascular Resistance at Adolescence after Mild-to-Moderate Traumatic Brain Injury in Early Development. Journal of Neurotrauma, 2019, 36, 601-608.	1.7	11
14	Goldilocks Zone of Ictal Onset: Partially Recovered Synapses Provide the Kindling to Fuel Ictal Activity. Epilepsy Currents, 2019, 19, 330-332.	0.4	1
15	The p75NTR Influences Cerebellar Circuit Development and Adult Behavior via Regulation of Cell Cycle Duration of Granule Cell Progenitors. Journal of Neuroscience, 2019, 39, 9119-9129.	1.7	20
16	Consolidated Biochemical Profile of Subacute Stage Traumatic Brain Injury in Early Development. Frontiers in Neuroscience, 2019, 13, 431.	1.4	11
17	Beneficial Effects of Kaempferol after Developmental Traumatic Brain Injury Is through Protection of Mitochondrial Function, Oxidative Metabolism, and Neural Viability. Journal of Neurotrauma, 2019, 36, 1264-1278.	1.7	31
18	Converging early responses to brain injury pave the road to epileptogenesis. Journal of Neuroscience Research, 2019, 97, 1335-1344.	1.3	16

#	Article	IF	Citations
19	Reefer to the Rescue: The Dope on Cannabidiol as a Multi-Symptom Panacea for Dravet Syndrome. Epilepsy Currents, 2018, 18, 118-120.	0.4	2
20	Early behavioral and metabolomic change after mild to moderate traumatic brain injury in the developing brain. Neurochemistry International, 2018, 120, 75-86.	1.9	25
21	High Ca2+ Influx During Traumatic Brain Injury Leads to Caspase-1-Dependent Neuroinflammation and Cell Death. Molecular Neurobiology, 2017, 54, 3964-3975.	1.9	36
22	Enhanced Dentate Neurogenesis after Brain Injury Undermines Long-Term Neurogenic Potential and Promotes Seizure Susceptibility. Stem Cell Reports, 2017, 9, 972-984.	2.3	73
23	Traumatic brain injury induced matrix metalloproteinase2 cleaves CXCL12Î± (stromal cell derived factor) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	30
24	Lighting the Fuse: Deconstructing Complex Network Interactions Using On-Demand Seizures. Epilepsy Currents, 2017, 17, 174-176.	0.4	0
25	Illuminating the Role for Chloride Dysregulation in Network Activity. Epilepsy Currents, 2016, 16, 258-260.	0.4	0
26	Fingerprints of Interictal Spikes: Can Imprints Deliver a Verdict on Their Role in Epilepsy?. Epilepsy Currents, 2016, 16, 41-42.	0.4	0
27	Facilitating Mitochondrial Calcium Uptake Improves Activation-Induced Cerebral Blood Flow and Behavior after mTBI. Frontiers in Systems Neuroscience, 2016, 10, 19.	1.2	18
28	Immunostaining of Biocytin-filled and Processed Sections for Neurochemical Markers. Journal of Visualized Experiments, 2016, , .	0.2	19
29	Dentate cannabinoid-sensitive interneurons undergo unique and selective strengthening of mutual synaptic inhibition in experimental epilepsy. Neurobiology of Disease, 2016, 89, 23-35.	2.1	13
30	Functional Reduction in Cannabinoid-Sensitive Heterotypic Inhibition of Dentate Basket Cells in Epilepsy: Impact on Network Rhythms. Cerebral Cortex, 2016, 26, 4299-4314.	1.6	24
31	Marching towards a Seizure: Spatio-Temporal Evolution of Preictal Activity. Epilepsy Currents, 2015, 15, 267-268.	0.4	3
32	Dentate total molecular layer interneurons mediate cannabinoidâ€sensitive inhibition. Hippocampus, 2015, 25, 884-889.	0.9	17
33	Fluid percussion injury device for the precise control of injury parameters. Journal of Neuroscience Methods, 2015, 248, 16-26.	1.3	14
34	Long-Lasting Suppression of Acoustic Startle Response after Mild Traumatic Brain Injury. Journal of Neurotrauma, 2015, 32, 801-810.	1.7	23
35	Toll-like receptor 4 enhancement of non-NMDA synaptic currents increases dentate excitability after brain injury. Neurobiology of Disease, 2015, 74, 240-253.	2.1	49
36	Electrophysiological monitoring of injury progression in the rat cerebellar cortex. Frontiers in Systems Neuroscience, 2014, 8, 197.	1.2	15

#	Article	IF	Citations
37	Distinct effect of impact rise times on immediate and early neuropathology after brain injury in juvenile rats. Journal of Neuroscience Research, 2014, 92, 1350-1361.	1.3	21
38	Status epilepticus enhances tonic GABA currents and depolarizes GABA reversal potential in dentate fast-spiking basket cells. Journal of Neurophysiology, 2013, 109, 1746-1763.	0.9	57
39	Seizure-induced alterations in fast-spiking basket cell GABA currents modulate frequency and coherence of gamma oscillation in network simulations. Chaos, 2013, 23, 046109.	1.0	14
40	A Reinforcing Circuit Action of Extrasynaptic GABAA Receptor Modulators on Cerebellar Granule Cell Inhibition. PLoS ONE, 2013, 8, e72976.	1.1	10
41	Table-top air pressure-driven shock tube to induce a blast traumatic brain injury. , 2012, , .		1
42	Decrease in Tonic Inhibition Contributes to Increase in Dentate Semilunar Granule Cell Excitability after Brain Injury. Journal of Neuroscience, 2012, 32, 2523-2537.	1.7	99
43	Precisely controllable traumatic brain injury devices for rodent models. , 2011, , .		2
44	Developmental regulation and neuroprotective effects of striatal tonic GABAA currents. Neuroscience, 2010, 167, 644-655.	1.1	76
45	Modeling Circuit Alterations in Epilepsy. , 2008, , 89-111.		6
46	Topological Determinants of Epileptogenesis in Large-Scale Structural and Functional Models of the Dentate Gyrus Derived From Experimental Data. Journal of Neurophysiology, 2007, 97, 1566-1587.	0.9	206
47	Modeling the dentate gyrus. Progress in Brain Research, 2007, 163, 639-658.	0.9	46
48	Ethanol acts directly on extrasynaptic subtypes of GABAA receptors to increase tonic inhibition. Alcohol, 2007, 41, 211-221.	0.8	108
49	Contributions of the GABAA Receptor Â6 Subunit to Phasic and Tonic Inhibition Revealed by a Naturally Occurring Polymorphism in the Â6 Gene. Journal of Neuroscience, 2006, 26, 3357-3364.	1.7	88
50	Role of Mossy Fiber Sprouting and Mossy Cell Loss in Hyperexcitability: A Network Model of the Dentate Gyrus Incorporating Cell Types and Axonal Topography. Journal of Neurophysiology, 2005, 93, 437-453.	0.9	240
51	Impact of Heterogeneous Perisomatic IPSC Populations on Pyramidal Cell Firing Rates. Journal of Neurophysiology, 2004, 91, 2849-2858.	0.9	20
52	Rapid Deletion of Mossy Cells Does Not Result in a Hyperexcitable Dentate Gyrus: Implications for Epileptogenesis. Journal of Neuroscience, 2004, 24, 2259-2269.	1.7	106
53	Plasticity of interneuronal species diversity and parameter variance in neurological diseases. Trends in Neurosciences, 2004, 27, 504-510.	4.2	38
54	Post-Traumatic Hyperexcitability Is Not Caused by Impaired Buffering of Extracellular Potassium. Journal of Neuroscience, 2003, 23, 5865-5876.	1.7	36

#	Article	IF	Citations
55	Postsynaptic effects of GABAergic synaptic diversity: regulation of neuronal excitability by changes in IPSC variance. Neuropharmacology, 2002, 43, 511-522.	2.0	36
56	H-channels in epilepsy: new targets for seizure control?. Trends in Pharmacological Sciences, 2002, 23, 552-557.	4.0	39
57	Mossy cells in epilepsy: rigor mortis or vigor mortis?. Trends in Neurosciences, 2002, 25, 140-144.	4.2	135
58	Long-term hyperexcitability in the hippocampus after experimental head trauma. Annals of Neurology, 2001, 50, 708-717.	2.8	225
59	Granule cell hyperexcitability in the early postâ€traumatic rat dentate gyrus: the â€˜irritable mossy cellâ€™ hypothesis. Journal of Physiology, 2000, 524, 117-134.	1.3	181