Merab Kokaia

List of Publications by Year
in descending order

72 papers	3,410 citations	147801 31 h-index	144013 57 g-index
72 all docs	72 docs citations	72 times ranked	4318 citing authors

#	Article	IF	Citations
1	Advances in the development of biomarkers for epilepsy. Lancet Neurology, The, 2016, 15, 843-856.	10.2	283
2	Suppressed Epileptogenesis in BDNF Mutant Mice. Experimental Neurology, 1995, 133, 215-224.	4.1	244
3	Environment Matters: Synaptic Properties of Neurons Born in the Epileptic Adult Brain Develop to Reduce Excitability. Neuron, 2006, 52, 1047-1059.	8.1	234
4	Optogenetic control of epileptiform activity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12162-12167.	7.1	225
5	Grafted neural stem cells develop into functional pyramidal neurons and integrate into host cortical circuitry. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 17089-17094.	7.1	191
6	Wnt5a-treated midbrain neural stem cells improve dopamine cell replacement therapy in parkinsonian mice. Journal of Clinical Investigation, 2008, 118, 149-160.	8.2	152
7	Inflammation Regulates Functional Integration of Neurons Born in Adult Brain. Journal of Neuroscience, 2008, 28, 12477-12488.	3.6	134
8	Brain Insults in Rats Induce Increased Expression of the BDNF Gene through Differential Use of Multiple Promoters. European Journal of Neuroscience, 1994, 6, 587-596.	2.6	108
9	Global Optogenetic Activation of Inhibitory Interneurons during Epileptiform Activity. Journal of Neuroscience, 2014, 34, 3364-3377.	3.6	103
10	Functional Integration of Grafted Neural Stem Cell-Derived Dopaminergic Neurons Monitored by Optogenetics in an In Vitro Parkinson Model. PLoS ONE, 2011, 6, e17560.	2.5	94
11	Seizure Suppression by GDNF Gene Therapy in Animal Models of Epilepsy. Molecular Therapy, 2007, 15, 1106-1113.	8.2	87
12	Adeno-associated viral vector-induced overexpression of neuropeptide Y Y2 receptors in the hippocampus suppresses seizures. Brain, 2010, 133, 2778-2788.	7.6	82
13	Delayed kindling development after rapidly recurring seizures: relation to mossy fiber sprouting and neurotrophin, GAP-43 and dynorphin gene expression. Brain Research, 1996, 712, 19-34.	2.2	76
14	Seizureâ€induced neurogenesis in the adult brain. European Journal of Neuroscience, 2011, 33, 1133-1138.	2.6	66
15	Hippocampal NPY gene transfer attenuates seizures without affecting epilepsy-induced impairment of LTP. Experimental Neurology, 2009, 215, 328-333.	4.1	61
16	Endogenous Neurotrophin-3 Regulates Short-Term Plasticity at Lateral Perforant Pathâ€“Granule Cell Synapses. Journal of Neuroscience, 1998, 18, 8730-8739.	3.6	59
17	Optogenetic control of human neurons in organotypic brain cultures. Scientific Reports, 2016, 6, 24818.	3.3	56
18	NPY gene transfer in the hippocampus attenuates synaptic plasticity and learning. Hippocampus, 2008, 18, 564-574.	1.9	55

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19	Functional integration of new hippocampal neurons following insults to the adult brain is determined by characteristics of pathological environment. Experimental Neurology, 2011, 229, 484-493.	4.1	54
20	Differential suppression of seizures via Y2 and Y5 neuropeptide Y receptors. Neurobiology of Disease, 2005, 20, 760-772.	4.4	51
21	Optogenetics Reveal Delayed Afferent Synaptogenesis on Grafted Human-Induced Pluripotent Stem Cell-Derived Neural Progenitors. Stem Cells, 2014, 32, 3088-3098.	3.2	49
22	An optogenetic approach in epilepsy. Neuropharmacology, 2013, 69, 89-95.	4.1	47
23	Afferent-specific modulation of short-term synaptic plasticity by neurotrophins in dentate gyrus. European Journal of Neuroscience, 2000, 12, 662-669.	2.6	44
24	Epilepsy therapy development: Technical and methodologic issues in studies with animal models. Epilepsia, 2013, 54, 13-23.	5.1	44
25	Optogenetic inhibition of chemically induced hypersynchronized bursting in mice. Neurobiology of Disease, 2014, 65, 133-141.	4.4	44
26	Differential Effect of Neuropeptides on Excitatory Synaptic Transmission in Human Epileptic Hippocampus. Journal of Neuroscience, 2015, 35, 9622-9631.	3.6	44
27	Combined gene overexpression of neuropeptide Y and its receptor Y5 in the hippocampus suppresses seizures. Neurobiology of Disease, 2012, 45, 288-296.	4.4	42
28	Decreased expression of brain-derived neurotrophic factor in BDNF+/âˆ’ mice is associated with enhanced recovery of motor performance and increased neuroblast number following experimental stroke. Journal of Neuroscience Research, 2006, 84, 626-631.	2.9	38
29	GDNF released from encapsulated cells suppresses seizure activity in the epileptic hippocampus. Experimental Neurology, 2009, 216, 413-419.	4.1	37
30	Functional properties and synaptic integration of genetically labelled dopaminergic neurons in intrastriatal grafts. European Journal of Neuroscience, 2005, 21, 2793-2799.	2.6	35
31	Common data elements and data management: Remedy to cure underpowered preclinical studies. Epilepsy Research, 2017, 129, 87-90.	1.6	35
32	Translational approach for gene therapy in epilepsy: Model system and unilateral overexpression of neuropeptide Y and Y2 receptors. Neurobiology of Disease, 2016, 86, 52-61.	4.4	32
33	Inhibition of epileptiform activity by neuropeptide Y in brain tissue from drug-resistant temporal lobe epilepsy patients. Scientific Reports, 2019, 9, 19393.	3.3	31
34	Long-Term, Targeted Delivery of GDNF from Encapsulated Cells Is Neuroprotective and Reduces Seizures in the Pilocarpine Model of Epilepsy. Journal of Neuroscience, 2019, 39, 2144-2156.	3.6	29
35	Dynamic interaction of local and transhemispheric networks is necessary for progressive intensification of hippocampal seizures. Scientific Reports, 2018, 8, 5669.	3.3	28
36	Long-term potentiation of single subicular neurons in mice. Hippocampus, 2000, 10, 684-692.	1.9	27

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37	Epilepsy and optogenetics: can seizures be controlled by light?. Clinical Science, 2017, 131, 1605-1616.	4.3	27
38	Activity-dependent volume transmission by transgene NPY attenuates glutamate release and LTP in the subiculum. Molecular and Cellular Neurosciences, 2008, 39, 229-237.	2.2	24
39	Altered Chloride Homeostasis Decreases the Action Potential Threshold and Increases Hyperexcitability in Hippocampal Neurons. ENeuro, 2017, 4, ENEURO.0172-17.2017.	1.9	24
40	Leaky Optoelectrical Fiber for Optogenetic Stimulation and Electrochemical Detection of Dopamine Exocytosis from Human Dopaminergic Neurons. Advanced Science, 2019, 6, 1902011.	11.2	23
41	Galanin expressed in the excitatory fibers attenuates synaptic strength and generalized seizures in the piriform cortex of mice. Experimental Neurology, 2006, 200, 398-406.	4.1	20
42	VEGF Receptor-2 (Flk-1) Overexpression in Mice Counteracts Focal Epileptic Seizures. PLoS ONE, 2012, 7, e40535.	2.5	20
43	How Might Novel Technologies Such as Optogenetics Lead to Better Treatments in Epilepsy?. Advances in Experimental Medicine and Biology, 2014, 813, 319-336.	1.6	19
44	Tuning afferent synapses of hippocampal interneurons by neuropeptide Y. Hippocampus, 2011, 21, 198-211.	1.9	18
45	Advancing research toward faster diagnosis, better treatment, and end of stigma in epilepsy. Epilepsia, 2019, 60, 1281-1292.	5.1	17
46	Encapsulated galaninâ€producing cells attenuate focal epileptic seizures in the hippocampus. Epilepsia, 2014, 55, 167-174.	5.1	16
47	Functional properties of the human ventral mesencephalic neural stem cell line hVM1. Experimental Neurology, 2010, 223, 653-656.	4.1	15
48	Altered profile of basket cell afferent synapses in hyperâ€excitable dentate gyrus revealed by optogenetic and twoâ€pathway stimulations. European Journal of Neuroscience, 2012, 36, 1971-1983.	2.6	15
49	Disease Modification by Combinatorial Single Vector Gene Therapy: A Preclinical Translational Study in Epilepsy. Molecular Therapy - Methods and Clinical Development, 2019, 15, 179-193.	4.1	14
50	Human midbrain precursors activate the expected developmental genetic program and differentiate long-term to functional A9 dopamine neurons in vitro. Enhancement by Bcl-XL. Experimental Cell Research, 2012, 318, 2446-2459.	2.6	13
51	Unilateral ex vivo gene therapy by GDNF in epileptic rats. Gene Therapy, 2019, 26, 65-74.	4.5	12
52	Chronic BDNF deficiency permanently modifies excitatory synapses in the piriform cortex. Journal of Neuroscience Research, 2005, 81, 696-705.	2.9	10
53	Gene Therapy Vector Encoding Neuropeptide Y and Its Receptor Y2 for Future Treatment of Epilepsy: Preclinical Data in Rats. Frontiers in Molecular Neuroscience, 2020, 13, 232.	2.9	10
54	Long-Term Effects of Myoinositol on Behavioural Seizures and Biochemical Changes Evoked by Kainic Acid Induced Epileptogenesis. BioMed Research International, 2019, 2019, 1-14.	1.9	9

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55	Human Stem Cell-Derived GABAergic Interneurons Establish Efferent Synapses onto Host Neurons in Rat Epileptic Hippocampus and Inhibit Spontaneous Recurrent Seizures. International Journal of Molecular Sciences, 2021, 22, 13243.	4.1	9
56	Neuropeptide Y Y5 receptors suppress in vitro spontaneous epileptiform bursting in the rat hippocampus. NeuroReport, 2004, 15, 339-343.	1.2	8
57	Activity-dependent long-term plasticity of afferent synapses on grafted stem/progenitor cell-derived neurons. Experimental Neurology, 2011, 229, 274-281.	4.1	8
58	Preserved Function of Afferent Parvalbumin-Positive Perisomatic Inhibitory Synapses of Dentate Granule Cells in Rapidly Kindled Mice. Frontiers in Cellular Neuroscience, 2017, 11, 433.	3.7	8
59	Human stem cell-derived GABAergic neurons functionally integrate into human neuronal networks. Scientific Reports, 2021, 11, 22050.	3.3	8
60	Myo-Inositol Limits Kainic Acid-Induced Epileptogenesis in Rats. International Journal of Molecular Sciences, 2022, 23, 1198.	4.1	7
61	Electrophysiological investigations of synaptic connectivity between host and graft neurons. Progress in Brain Research, 2012, 200, 97-112.	1.4	6
62	Lipid mediator nâ€3 docosapentaenoic acidâ€derived protectin D1 enhances synaptic inhibition of hippocampal principal neurons by interaction with a Gâ€proteinâ€coupled receptor. FASEB Journal, 2022, 36, e22203.	0.5	6
63	Light-activated channels in acute seizures. Epilepsia, 2011, 52, 16-18.	5.1	5
64	Concentration- and time-dependent effects of myo-inositol on evoked epileptic afterdischarge in the hippocampus in vivo. NeuroReport, 2019, 30, 1129-1134.	1.2	5
65	Directly Converted Human Fibroblasts Mature to Neurons and Show Long-Term Survival in Adult Rodent Hippocampus. Stem Cells International, 2017, 2017, 1-9.	2.5	4
66	Neuropeptide gene therapy for epilepsy: viral vectors, stem cells and neurogenesis. Future Neurology, 2006, 1, 843-851.	0.5	2
67	Short-Term Grafting of Human Neural Stem Cells: Electrophysiological Properties and Motor Behavioral Amelioration in Experimental Parkinson's Disease. Cell Transplantation, 2016, 25, 2083-2097.	2.5	2
68	Editorial: Gene Therapy in the CNS â€" Progress and Prospects for Novel Therapies. Frontiers in Molecular Neuroscience, 2021, 14, 778134.	2.9	2
69	Novel perspectives in treatment of epilepsy. Epilepsy Research, 2009, 85, 129-130.	1.6	1
70	Gene therapy of focal-onset epilepsy by adeno-associated virus vector-mediated overexpression of neuropeptide Y. Epilepsia, 2010, 51, 96-96.	5.1	1
71	Meeting report: EpiXchange II brings together European epilepsy research projects to discuss latest advances. Epilepsy Research, 2021, 178, 106811.	1.6	1
72	Toward an Optogenetic Therapy for Epilepsy. , 0, , 292-307.		0