Scott C Baraban

List of Publications by Year
in descending order

118 papers	7,620 citations	47 h-index (47006)	82 g-index (58581)
126 all docs	126 docs citations	126 times ranked	7851 citing authors

#	Article	IF	Citations
1	Mice lacking Dlx1 show subtype-specific loss of interneurons, reduced inhibition and epilepsy. Nature Neuroscience, 2005, 8, 1059-1068.	14.8	458
2	Drug screening in Scn1a zebrafish mutant identifies clemizole as a potential Dravet syndrome treatment. Nature Communications, 2013, 4, 2410.	12.8	335
3	Intrinsically determined cell death of developing cortical interneurons. Nature, 2012, 491, 109-113.	27.8	293
4	Knock-Out Mice Reveal a Critical Antiepileptic Role for Neuropeptide Y. Journal of Neuroscience, 1997, 17, 8927-8936.	3.6	285
5	GABA progenitors grafted into the adult epileptic brain control seizures and abnormal behavior. Nature Neuroscience, 2013, 16, 692-697.	14.8	250
6	Animal models in epilepsy research: legacies and new directions. Nature Neuroscience, 2015, 18, 339-343.	14.8	209
7	Dissociation of Synchronization and Excitability in Furosemide Blockade of Epileptiform Activity. Science, 1995, 270, 99-102.	12.6	197
8	Osmolarity, ionic flux, and changes in brain excitability. Epilepsy Research, 1998, 32, 275-285.	1.6	196
9	Reduction of seizures by transplantation of cortical GABAergic interneuron precursors into Kv1.1 mutant mice. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15472-15477.	7.1	187
10	Clemizole and modulators of serotonin signalling suppress seizures in Dravet syndrome. Brain, 2017, 140, aww342.	7.6	174
11	Interneuron Diversity series: Interneuronal neuropeptides â€“ endogenous regulators of neuronal excitability. Trends in Neurosciences, 2004, 27, 135-142.	8.6	172
12	Cortical Inhibition Modified by Embryonic Neural Precursors Grafted into the Postnatal Brain. Journal of Neuroscience, 2006, 26, 7380-7389.	3.6	170
13	Dysfunction of Synaptic Inhibition in Epilepsy Associated with Focal Cortical Dysplasia. Journal of Neuroscience, 2005, 25, 9649-9657.	3.6	165
14	Dlx5andDlx6Regulate the Development of Parvalbumin-Expressing Cortical Interneurons. Journal of Neuroscience, 2010, 30, 5334-5345.	3.6	162
15	Zebrafish as a model for studying genetic aspects of epilepsy. DMM Disease Models and Mechanisms, 2010, 3, 144-148.	2.4	139
16	Chapter 8 Role of medulla oblongata in generation of sympathetic and vagal outflows. Progress in Brain Research, 1996, 107, 127-144.	1.4	129
17	Neocortical hyperexcitability in a human case of tuberous sclerosis complex and mice lacking neuronal expression ofTSC1. Annals of Neurology, 2007, 61, 139-152.	5.3	122
18	Stromal-Derived Factor-1 (CXCL12) Regulates Laminar Position of Cajal-Retzius Cells in Normal and Dysplastic Brains. Journal of Neuroscience, 2006, 26, 9404-9412.	3.6	121

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19	A Large-scale Mutagenesis Screen to Identify Seizure-resistant Zebrafish. Epilepsia, 2007, 48, 1151-1157.	5.1	121
20	Lhx6 Directly Regulates Arx and CXCR7 to Determine Cortical Interneuron Fate and Laminar Position. Neuron, 2014, 82, 350-364.	8.1	118
21	Large-Scale Phenotype-Based Antiepileptic Drug Screening in a Zebrafish Model of Dravet Syndrome. ENeuro, 2015, 2, ENEURO.0068-15.2015.	1.9	113
22	Hippocampal Heterotopia Lack Functional Kv4.2 Potassium Channels in the Methylazoxymethanol Model of Cortical Malformations and Epilepsy. Journal of Neuroscience, 2001, 21, 6626-6634.	3.6	112
23	A novel zebrafish model of hyperthermia-induced seizures reveals a role for TRPV4 channels and NMDA-type glutamate receptors. Experimental Neurology, 2012, 237, 199-206.	4.1	109
24	14-3-3Îµ and Î¶ Regulate Neurogenesis and Differentiation of Neuronal Progenitor Cells in the Developing Brain. Journal of Neuroscience, 2014, 34, 12168-12181.	3.6	102
25	Electrophysiology of CA1 pyramidal neurons in an animal model of neuronal migration disorders: prenatal methylazoxymethanol treatment. Epilepsy Research, 1995, 22, 145-156.	1.6	100
26	Spontaneous Seizures and Altered Gene Expression in GABA Signaling Pathways in amind bombMutant Zebrafish. Journal of Neuroscience, 2010, 30, 13718-13728.	3.6	96
27	Emerging epilepsy models: insights from mice, flies, worms and fish. Current Opinion in Neurology, 2007, 20, 164-168.	3.6	95
28	Epilepsy, Behavioral Abnormalities, and Physiological Comorbidities in Syntaxin-Binding Protein 1 (STXBP1) Mutant Zebrafish. PLoS ONE, 2016, 11, e0151148.	2.5	87
29	Flurothyl seizure susceptibility in rats following prenatal methylazoxymethanol treatment. Epilepsy Research, 1996, 23, 189-194.	1.6	86
30	Effects of antiepileptic drugs on induced epileptiform activity in a rat model of dysplasia. Epilepsy Research, 2002, 50, 251-264.	1.6	85
31	A role for the mTOR pathway in surface expression of AMPA receptors. Neuroscience Letters, 2006, 401, 35-39.	2.1	82
32	Preclinical Animal Models for Dravet Syndrome: Seizure Phenotypes, Comorbidities and Drug Screening. Frontiers in Pharmacology, 2018, 9, 573.	3.5	77
33	Characterization of heterotopic cell clusters in the hippocampus of rats exposed to methylazoxymethanol in utero. Epilepsy Research, 2000, 39, 87-102.	1.6	76
34	Network Properties Revealed during Multi-Scale Calcium Imaging of Seizure Activity in Zebrafish. ENeuro, 2019, 6, ENEURO.0041-19.2019.	1.9	74
35	Dlx1andDlx2Promote Interneuron GABA Synthesis, Synaptogenesis, and Dendritogenesis. Cerebral Cortex, 2018, 28, 3797-3815.	2.9	72
36	Modulation of Burst Frequency, Duration, and Amplitude in the Zero-Ca²⁺ Model of Epileptiform Activity. Journal of Neurophysiology, 1999, 82, 2262-2270.	1.8	70

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37	Impaired neural development in a zebrafish model for Lowe syndrome. Human Molecular Genetics, 2012, 21, 1744-1759.	2.9	69
38	Neuropeptide Y and epilepsy: recent progress, prospects and controversies. Neuropeptides, 2004, 38, 261-265.	2.2	68
39	Olig1 Function Is Required to Repress Dlx1/2 and Interneuron Production in Mammalian Brain. Neuron, 2014, 81, 574-587.	8.1	63
40	Effects of morphine and morphine withdrawal on adrenergic neurons of the rat rostral ventrolateral medulla. Brain Research, 1995, 676, 245-257.	2.2	60
41	NPAS1 Represses the Generation of Specific Subtypes of Cortical Interneurons. Neuron, 2014, 84, 940-953.	8.1	60
42	Altered Glycolysis and Mitochondrial Respiration in a Zebrafish Model of Dravet Syndrome. ENeuro, 2016, 3, ENEURO.0008-16.2016.	1.9	60
43	A Novel Long-term, Multi-Channel and Non-invasive Electrophysiology Platform for Zebrafish. Scientific Reports, 2016, 6, 28248.	3.3	59
44	Heterotopic Neurons with Altered Inhibitory Synaptic Function in an Animal Model of Malformation-Associated Epilepsy. Journal of Neuroscience, 2002, 22, 7596-7605.	3.6	57
45	Target-Specific Neuropeptide Y-Ergic Synaptic Inhibition and Its Network Consequences within the Mammalian Thalamus. Journal of Neuroscience, 2003, 23, 9639-9649.	3.6	55
46	Altered Glutamate Receptor?Transporter Expression and Spontaneous Seizures in Rats Exposed to Methylazoxymethanol in Utero. Epilepsia, 2007, 48, 158-68.	5.1	54
47	Y5 Receptors Mediate Neuropeptide Y Actions at Excitatory Synapses in Area CA3 of the Mouse Hippocampus. Journal of Neurophysiology, 2002, 87, 558-566.	1.8	52
48	Interneuron Transplantation as a Treatment for Epilepsy. Cold Spring Harbor Perspectives in Medicine, 2015, 5, a022376.	6.2	52
49	Bidirectional homeostatic plasticity induced by interneuron cell death and transplantation in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 492-497.	7.1	49
50	The promise of an interneuronâ€based cell therapy for epilepsy. Developmental Neurobiology, 2011, 71, 107-117.	3.0	45
51	Characterization of Inhibitory Circuits in the Malformed Hippocampus of Lis1 Mutant Mice. Journal of Neurophysiology, 2007, 98, 2737-2746.	1.8	43
52	Advancing epilepsy treatment through personalized genetic zebrafish models. Progress in Brain Research, 2016, 226, 195-207.	1.4	43
53	Persistent seizure control in epileptic mice transplanted with gammaâ€aminobutyric acid progenitors. Annals of Neurology, 2017, 82, 530-542.	5.3	43
54	Neuropeptide Y and Limbic Seizures. Reviews in the Neurosciences, 1998, 9, 117-28.	2.9	42

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55	Neuropeptide Y modulates a G protein-coupled inwardly rectifying potassium current in the mouse hippocampus. Neuroscience Letters, 2003, 340, 9-12.	2.1	42
56	Abnormal Cortical Cells and Astrocytomas in the Eker Rat Model of Tuberous Sclerosis Complex. Epilepsia, 2004, 45, 1525-1530.	5.1	41
57	Seizures, enhanced excitation, and increased vesicle number in Lis1 mutant mice. Annals of Neurology, 2009, 66, 644-653.	5.3	37
58	Behavioral Comorbidities and Drug Treatments in a Zebrafishscn1labModel of Dravet Syndrome. ENeuro, 2017, 4, ENEURO.0066-17.2017.	1.9	37
59	Forebrain Electrophysiological Recording in Larval Zebrafish. Journal of Visualized Experiments, 2013, , .	0.3	35
60	Conditions Sufficient for Nonsynaptic Epileptogenesis in the CA1 Region of Hippocampal Slices. Journal of Neurophysiology, 2002, 87, 62-71.	1.8	34
61	Antiepileptic Actions of Neuropeptide Y in the Mouse Hippocampus Require Y5 Receptors. Epilepsia, 2002, 43, 9-13.	5.1	34
62	Zebrafish studies identify serotonin receptors mediating antiepileptic activity in Dravet syndrome. Brain Communications, 2019, 1, fcz008.	3.3	34
63	Phenotypic analysis of catastrophic childhood epilepsy genes. Communications Biology, 2021, 4, 680.	4.4	34
64	Expression and function of KCNQ channels in larval zebrafish. Developmental Neurobiology, 2012, 72, 186-198.	3.0	32
65	Maximally selective single-cell target for circuit control in epilepsy models. Neuron, 2021, 109, 2556-2572.e6.	8.1	31
66	LIS1 Deficiency Promotes Dysfunctional Synaptic Integration of Granule Cells Generated in the Developing and Adult Dentate Gyrus. Journal of Neuroscience, 2012, 32, 12862-12875.	3.6	30
67	Prolonged NMDA-Mediated Responses, Altered Ifenprodil Sensitivity, and Epileptiform-Like Events in the Malformed Hippocampus of Methylazoxymethanol Exposed Rats. Journal of Neurophysiology, 2005, 94, 153-162.	1.8	29
68	Embryonic and early postnatal abnormalities contributing to the development of hippocampal malformations in a rodent model of dysplasia. Journal of Comparative Neurology, 2006, 495, 133-148.	1.6	29
69	Robust tonic GABA currents can inhibit cell firing in mouse newborn neocortical pyramidal cells. European Journal of Neuroscience, 2010, 32, 1310-1318.	2.6	29
70	Use of â€œMGE Enhancersâ€•for Labeling and Selection of Embryonic Stem Cell-Derived Medial Ganglionic Eminence (MGE) Progenitors and Neurons. PLoS ONE, 2013, 8, e61956.	2.5	28
71	Mutations of conserved non-coding elements of PITX2 in patients with ocular dysgenesis and developmental glaucoma. Human Molecular Genetics, 2017, 26, 3630-3638.	2.9	28
72	Synaptic integration of transplanted interneuron progenitor cells into native cortical networks. Journal of Neurophysiology, 2016, 116, 472-478.	1.8	27

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73	Hippocampal heterotopia with molecular and electrophysiological properties of neocortical neurons. Neuroscience, 2002, 114, 961-972.	2.3	26
74	Granule Cell Dispersion and Aberrant Neurogenesis in the Adult Hippocampus of an LIS1 Mutant Mouse. Developmental Neuroscience, 2007, 29, 91-98.	2.0	26
75	What New Modeling Approaches Will Help Us Identify Promising Drug Treatments?. Advances in Experimental Medicine and Biology, 2014, 813, 283-294.	1.6	26
76	Properties of a Calcium-Activated K+ Current on Interneurons in the Developing Rat Hippocampus. Journal of Neurophysiology, 2000, 83, 3453-3461.	1.8	25
77	Aberrant expression of genes necessary for neuronal development and notch signaling in an epileptic mind bomb zebrafish. Developmental Dynamics, 2011, 240, 1964-1976.	1.8	25
78	Medial Ganglionic Eminence Progenitors Transplanted into Hippocampus Integrate in a Functional and Subtype-Appropriate Manner. ENeuro, 2017, 4, ENEURO.0359-16.2017.	1.9	24
79	Hippocampal gamma and sharp-wave ripple oscillations are altered in a Cntnap2 mouse model of autism spectrum disorder. Cell Reports, 2021, 37, 109970.	6.4	24
80	Familial cortical myoclonus with a mutation in NOL3. Annals of Neurology, 2012, 72, 175-183.	5.3	23
81	Catastrophic Epilepsies of Childhood. Annual Review of Neuroscience, 2017, 40, 149-166.	10.7	23
82	Inhibitory Inputs to Hippocampal Interneurons Are Reorganized in Lis1 Mutant Mice. Journal of Neurophysiology, 2009, 102, 648-658.	1.8	22
83	Effects of Prenatal Cocaine Exposure on the Developing Hippocampus: Intrinsic and Synaptic Physiology. Journal of Neurophysiology, 1997, 77, 126-136.	1.8	21
84	Evidence for increased seizure susceptibility in rats exposed to cocaine in utero. Developmental Brain Research, 1997, 102, 189-196.	1.7	21
85	Hippocampal dysplasia in rats exposed to cocaine in utero. Developmental Brain Research, 1999, 117, 213-217.	1.7	21
86	Aberrant dentate gyrus cytoarchitecture and fiber lamination in LIS1 mutant mice. Hippocampus, 2008, 18, 758-765.	1.9	21
87	Developing cell transplantation for temporal lobe epilepsy. Neurosurgical Focus, 2008, 24, E17.	2.3	21
88	Deletion of Dlx1 results in reduced glutamatergic input to hippocampal interneurons. Journal of Neurophysiology, 2011, 105, 1984-1991.	1.8	21
89	Interneuron deficits in neurodevelopmental disorders: Implications for disease pathology and interneuron-based therapies. European Journal of Paediatric Neurology, 2020, 24, 81-88.	1.6	20
90	Phenotype-Based Screening of Synthetic Cannabinoids in a Dravet Syndrome Zebrafish Model. Frontiers in Pharmacology, 2020, 11, 464.	3.5	20

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91	A zebrafish-centric approach to antiepileptic drug development. DMM Disease Models and Mechanisms, 2021, 14, .	2.4	19
92	InÂvivo calcium imaging reveals disordered interictal network dynamics in epileptic stxbp1b zebrafish. IScience, 2021, 24, 102558.	4.1	16
93	Basic mechanisms ofÂMCD inÂanimal models. Epileptic Disorders, 2009, 11, 206-214.	1.3	14
94	Enhancing glucose metabolism via gluconeogenesis is therapeutic in a zebrafish model of Dravet syndrome. Brain Communications, 2021, 3, fcab004.	3.3	14
95	PAFAH1B1 haploinsufficiency disrupts GABA neurons and synaptic E/I balance in the dentate gyrus. Scientific Reports, 2017, 7, 8269.	3.3	13
96	Epileptogenesis in the Dysplastic Brain: A Revival of Familiar Themes. Epilepsy Currents, 2001, 1, 6-11.	0.8	12
97	A potential role for astrocytes in mediating the antiepileptic actions of furosemide in vitro. Neuroscience, 2004, 128, 655-663.	2.3	12
98	Cell Therapy Using GABAergic Neural Progenitors. , 2012, , 1122-1128.		12
99	Neocortical integration of transplanted GABA progenitor cells from wild type and GABAB receptor knockout mouse donors. Neuroscience Letters, 2014, 561, 52-57.	2.1	11
100	An Examination of Calcium Current Function on Heterotopic Neurons in Hippocampal Slices from Rats Exposed toâ€ƒMethylazoxymethanol. Epilepsia, 2003, 44, 315-321.	5.1	9
101	ALLN rescues an in vitro excitatory synaptic transmission deficit in Lis1 mutant mice. Journal of Neurophysiology, 2013, 109, 429-436.	1.8	9
102	Effects of Hyposmolar Solutions on Membrane Currents of Hippocampal Interneurons and Mossy Cells In Vitro. Journal of Neurophysiology, 1998, 79, 1108-1112.	1.8	8
103	A Review of Gene Expression Patterns in the Malformed Brain. Molecular Neurobiology, 2002, 26, 109-116.	4.0	8
104	Clemizole and trazodone are effective antiseizure treatments in a zebrafish model of <scp>STXBP1</scp> disorder. Epilepsia Open, 2022, 7, 504-511.	2.4	8
105	Interneuron origins in the embryonic porcine medial ganglionic eminence. Journal of Neuroscience, 2021, 41, JN-RM-2738-20.	3.6	7
106	Modeling Epilepsy and Seizures in Developing Zebrafish Larvae. , 2006, , 189-198.		7
107	Voltage-activated potassium currents in acutely dissociated hippocampal dentate gyrus neurons from neonatal rats. Developmental Brain Research, 1994, 81, 309-313.	1.7	6
108	Cell therapy for epilepsy using GABAergic neural progenitors. Epilepsia, 2010, 51, 94-94.	5.1	6

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109	GABAB receptors in maintenance of neocortical circuit function. Experimental Neurology, 2014, 261, 163-170.	4.1	4
110	Xenotransplantation of porcine progenitor cells in an epileptic California sea lion (Zalophus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 T	0.3	4
111	Animal Models of Epilepsy. , 2011, , 659-665.		1
112	Zebrafish as a Simple Vertebrate Organism for Epilepsy Research. Neuromethods, 2009, , 59-74.	0.3	1
113	Respiratory Control of Sympathetic Nerve Activity During Naxolone-Precipitated Morphine Withdrawal in Rats. Survey of Anesthesiology, 1994, 38, 130.	0.1	0
114	Epilepsy Research Takes Flight. Epilepsy Currents, 2002, 2, 100-101.	0.8	0
115	Pain without Gain (of Function): Sodium Channel Dysfunction in Epilepsy. Epilepsy Currents, 2004, 4, 158-159.	0.8	0
116	The Devil is in the Details: Stem Cells for the Treatment of Epilepsy. Epilepsy Currents, 2012, 12, 213-215.	0.8	0
117	Viral tracing of presynaptic inputs to newly born dentate granule cells in a rodent model of mesial temporal lobe epilepsy. Annals of Neurology, 2017, 81, 769-771.	5.3	0
118	In vivo Calcium Imaging Reveals Disordered Interictal Network Dynamics in Epileptic <i>stxbp1b</i> Zebrafish. SSRN Electronic Journal, 0, , .	0.4	0